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ABSTRACT

This publication is the final report of the Illinois Business Management Task Force, which conducted an intensive study of the business and management functions of Illinois' public elementary and secondary schools in 1972. Data for the study were gathered through a survey of a stratified sample of 137 local school districts. The report is organized in five major sections that describe findings of the statewide survey, present a digest of statewide recommendations, describe findings of a survey of the Chicago School System, present a digest of Chicago recommendations, and briefly discuss strategies for implementation of the task force's recommendations. The 21 subsections comprising the statewide report examine in turn various functions of Illinois' elementary and secondary school; the 20 similar subsections on the Chicago School System cover essentially the same functions. (Author/JG)

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State of **ILLINOIS**

Governor's Commission on Schools Business Management Task Force

Survey and Recommendations

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EA 009 209

GOVERNOR'S COMMISSION ON SCHOOLS/BUSINESS MANAGEMENT TASK FORCE

LEO H. SCHOENHOFEN / CHAIRMAN

November 1972

The Honorable Richard B. Ogilvie
Governor
State of Illinois
State House
Springfield, Illinois 62706

Dear Governor Ogilvie:

I am pleased and honored to submit, on behalf of the Business Management Task Force, this final report covering an intensive study of the business and management functions of elementary and secondary public education in Illinois. This survey and task force were authorized as part of your commission, created by Executive Order #1, dated January 12, 1972. A copy of this order is reproduced on the following page.

Our task force analyzed and evaluated the business operation of a representative sampling of Illinois' public school districts. As a result, we formulated constructive recommendations for more effective and economical business operations in our public schools.

We appreciate the cooperation received from public school personnel throughout the state. Their enthusiasm and spirit of mutual assistance were invaluable. In fact, a number of the recommendations in this report are the result of suggestions by school personnel.

Each task force member considered it a privilege and honor to participate in this survey. They sincerely hope this endeavor will provide continuing benefits to the citizens and taxpayers of Illinois and more importantly, to the children attending our public schools.

Sincerely,

Leo H Schoenhofen

Leo H. Schoenhofen
Chairman

Executive Order

WHEREAS:

The financing of the schools has become the pivotal question around which the future of state-local taxation hinges for the next several years. The traditional reliance on the local property tax has been shifting in recent years. Recent developments in the courts have accelerated the necessity of moving toward change in property tax burdens, equalization of school funding, and the consequent increase in sharing of the cost of education by other tax sources.

The public has become troubled at the inability to accurately assess the performance of our schools and the seeming unresponsiveness of educators to standards of accountability. Moreover, when evaluations are made, they seem to lead to a discouraging conclusion of lower learning levels in basic reading and mathematics, increased drop-outs and a general deterioration of academic achievements.

The business practices of a multi-billion dollar enterprise in this state are archaic, fragmented and in need of modern management principles. Reports of instances of gross mismanagement are too frequent. At a time of severe shortage of public funds for education, the record of performance for those dollars is unsatisfactory. The portion of the education dollar used for nonteaching purposes is too great.

The organization of education in Illinois is confused and unnecessarily complex. Each new layer has been added to the past rather than replacing others. The new Constitution calls for a State Board of Education and new tasks for the Chief School Officer. The historic changes of the 40's and 50's in consolidation and the dual districts differential funding may have served as innovative reforms at that time, but today serious reevaluations must be made about the needs of the 70's and 80's. A new definition and structuring of the balance between state authority and local control must be achieved in terms of principle as well as in specific instances or events.

NOW THEREFORE:

By virtue of powers vested in me as Governor of the State of Illinois, I do issue this Executive Order creating a Commission on Schools to examine and review the operations and financing of our schools and educational system.

The Commission shall operate through four working Task Forces:

- Finance
- Organization and Structure
- Classroom Quality
- Business Management Practices

The Governor of the State of Illinois shall serve as Chairman of the Commission and the Superintendent of Public Instruction of the State of Illinois shall serve as Vice Chairman. The Governor shall appoint the Chairman of each Task Force who will be full members of the Commission along with such other legislative and citizen members as the Governor may designate.

Dated at Springfield, Illinois this 12th day of January, 1972.

Richard B. Ogilvie

Richard B. Ogilvie, Governor

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Russell D. Haas
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Downstate Director of Finance

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Liaison—Governor's Commission on Schools

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Foreword

Elementary and secondary education in Illinois is a highly varied and major undertaking. More than 2.2-million students are enrolled in Illinois public schools and over 175,000 persons are employed full-time in educating these students. Student enrollment in each of the states 1,140 school districts range from over 500,000 students to less than 50. These districts serve a variety of cultural, social, educational, and economic needs. The educational system is dynamic, with curriculum, teaching methods, and school facilities reflecting continuing changes that are occurring at an ever-increasing rate. Thus, public education is faced with a number of major problems.

In order to obtain an objective statement of the problems and opportunities facing elementary and secondary education in Illinois, Governor Richard B. Ogilvie and Superintendent of Public Instruction Michael J. Bakalis established the Governor's Commission on Schools. Its primary responsibility was to conduct a comprehensive assessment of the current status of Illinois elementary and secondary education. In addition, the commission was charged with providing educators, state officials, and legislators with information to facilitate the orderly future growth of elementary and secondary education. The commission directed that four separate, but interrelated studies, be conducted covering:

- Finance
- Organization and Structure
- Classroom Quality
- Business Management Practices

In January 1972, Governor Ogilvie appointed Leo H. Schoenhofen, Chairman, Marcor Inc., Chicago, to the commission and named him as Chairman, Business Management Task Force. The Illinois business community was requested to survey school business management practices. To that end, The Public Education Management Survey, Inc., a nonprofit organization, was formed to secure the manpower, provide the funds, and organize the Business Management Task Force to conduct the study. The objective was to suggest more effective methods and procedures to reduce noninstructional expenditures in public education while maintaining Illinois' high quality standards.

The noninstructional functions of elementary and secondary education are, in themselves, a major undertaking involving employment of more than 43,000 persons and annual operating and capital expenditures in excess of $1-billion.

To ensure that the most effective use of resources were devoted to noninstructional activities, the Business Management Task Force was directed to:

- Evaluate the effectiveness of control over all noninstructional operating and administrative costs.
- Identify specific areas where improvement opportunities exist, then recommend actions to realize more goods and services for each available tax dollar.
- Provide long-range administrative guidelines to accommodate the future growth of elementary and secondary education.
- Investigate the application and use of timely cost measurement reports for various levels of operations and costs in elementary and secondary education.
- Coordinate and cooperate with other program efforts of the Governor's Commission on Schools.

In response to the request, 54 managers and executives were supplied without cost to the taxpayers, by the Illinois business community. The study involved a full-time effort of these loaned executives and business managers for a period of 12 weeks. Additionally, 15 part-time special assistants were involved for varying lengths of time. Coordination was provided by the Chicago-based management consulting firm of Warren King and Associates.

Task force personnel brought to the project a breadth and depth of business experience and specialized skills, encompassing all of the management functions found in Illinois elementary and secondary education. In total, this study represents a contribution to Illinois and elementary and secondary education of nearly $750,000. More than 135 firms provided the manpower and money necessary for the undertaking. A roster of personnel and a listing of sponsoring organizations is included elsewhere in this report.

The task force was organized into five functional teams, each representing an area of related business and management practices in the school systems. A sixth team, consisting of specialists in all areas represented by the five functional teams was organized to survey the Chicago school system. The results of the more detailed evaluation of Chicago's schools are presented in a separate section of this report. For emphasis, statewide recommendations applying to Chicago have been repeated in this section. Each of the six study teams was directed by an executive who also served on the Executive Committee.

The Executive Committee established task force policies and procedures. It directed the study of the 137 local school districts selected in the sample. In addition, the committee guided and conducted the functional study and unanimously approved each report section and recommendation included in this report.

Task force members spent more than 28,000 man hours and traveled nearly 200,000 miles in collecting data, analyzing information, and preparing findings and recommendations. The districts included in the well-structured, stratified, survey sample, were selected on a statistical basis. They are representatives of Illinois' elementary and secondary education.

In addition, task force members made a comprehensive review of appropriate activities of the Office of the Superintendent of Public Instruction. Activities at the Educational Service Region level were also reviewed, and other organizations and individuals concerned with elementary and secondary education in Illinois were contacted. Throughout, liaison was maintained with Governor's Commission Task Forces operating at the time of the study.

The 21 sections comprising the statewide report examine various noninstructional functions of Illinois' elementary and secondary education. The 20 report sections on the Chicago school system cover essentially the same functions. In total, this report includes 302 recommendations for improvement in public education business and management practices. Of this number, 61 or 20% require legislative action, 40 or 13% necessitate administrative change at the state level and 201 or 67% call for change in practices at the local school board or administrative level. The findings and recommendations are presented as a means for improving the efficiency of noninstructional activities in Illinois public schools from the pragmatic viewpoint of the business community. Their implementation would result in significant annual benefits, and it is anticipated this contribution will increase annually over the next several years.

An analysis of the potential benefits to Illinois is shown in the table below. These benefits were determined and based on actual operating and financial activities during the 1970-1971 school year. Unless the benefits could be reasonably determined, a recommendation was included without identifying economic gains. Benefits shown are to the school system, however in some cases these represent costs to other government units.

ECONOMIC SUMMARY OF BENEFITS

	Annual	One-Time
Saving	$242,751,000	$ 8,640,000
Income	62,090,000	490,000
Cost	2,020,000	17,802,000

This report uses the terms "savings" and "cost" to represent certain results of administrative improvements which are actually very complex accounting transactions. For example, cost avoidances, tax transfers, asset conversions, and the like are considered in the broadest sense as savings to the elementary and secondary school system.

After careful analysis during the implementation process, it will be noted that only a portion of these improvements will result in cash expenditure reductions through clear elimination of existing costs. Nevertheless, those items designated as savings in this report will, when implemented, provide positive financial benefits. Many such financial benefits will appear as improved efficiencies and can be classified as cost-effectiveness improvement recommendations. It is important that a "cash value" be placed on these cost-effectiveness recommendations so their value to the taxpayer is understood and clear priorities for their implementation can be established.

As the study phase progressed, it became readily apparent that subjects of the other Governor's Commission Task Forces had a significant impact upon business practices. Therefore, it was necessary to deal with these topics to a limited extent. However, this was not intended to supplant any work of these groups, but merely augment and reinforce their efforts. It should be clear, though, that the input from the business community is made with an objectivity that is unencumbered by past precedent, statute, social or political constraints.

The direction and control of education at all levels requires knowledge, experience, and skill in business management practices. The task force is of the opinion that this expertise is essential to the management of Illinois education. Further, this study alone will not accomplish the desired improvements. Action must be taken by the General Assembly, government officials, school boards, and educators. Accordingly, the task force asks careful consideration of the implementation procedures outlined in a separate section.

We are deeply aware of the dedication, loyalty, and hard work of the employees in the Illinois educational system, and appreciate their cooperation and assistance during this project. Data and materials were willingly provided and the enthusiastic cooperation of all those with whom we worked contributed greatly to the value of this report. The task force is appreciative of the opportunity afforded it by Governor Ogilvie and Superintendent Bakalis to make this contribution to the future of Illinois' public elementary and secondary education.

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Section I
Statewide School System Survey Reports

Governor's Commission on Schools
Business Management Task Force

Introduction

Few institutions contribute more to the well being of a nation than does the educational system, especially at the elementary and secondary levels. It is here we set the stage for tomorrow. Recognizing this, the 1970 Illinois State Constitution set a high goal in calling for the educational development of all persons to their fullest capabilities. This goal, in itself, provides a unique challenge, but when it is applied across the spectrum of our young—the gifted, the normal, the handicapped—the challenge is not only unique, it is exciting.

The challenge must be met by professional and dedicated teaching staffs supported by modern organizational and administrative systems. Clean-cut lines of responsibility and sound administrative and fiscal management will add to the quality of education by directing administrative dollars into instructional areas. The application of sound management practices can help to:

- Optimize the results achieved from the efforts of the individuals employed by and dedicated to the successful operation of our schools.
- Check the sharply increasing expenditures occurring annually in our fragmented elementary and secondary school system.
- Make available substantial dollars from the administrative or noninstructional area of education for investment in instructional areas by reevaluating, restructuring, and streamlining administrative functions at state, regional, and local levels.

The administration of the public elementary and secondary education in Illinois must be viewed as a major undertaking in management. Our schools employed over 175,000 full-time individuals and spent $2.6-billion in 1970-1971 to educate some 2.2-million students.

At the present time, the direction and administration of these funds is functionally and directionally fragmented at the state, regional, and local levels. The state office has little enforceable responsibility for business policies, procedures, and methods. Further, 102 regional or county superintendents are elected locally, paid by the General Assembly, report to county boards of trustees, and serve as an additional communication link between the state office and district authorities. At the local level, there are 1,140 district superintendents, hired by the local boards, who are expected to be responsive to students, parents, taxpayers, county, state, and federal authorities, as well as the General Assembly. Lack of objectivity and cohesive action plans, political expediency, multiplicity of direction and effort, and little continuity between principle and practice prevails.

The situations in Cook County and in the Chicago school system are further compounded by required interaction with township officials and officials of the City of Chicago. Certain legal, regulatory, administrative procedures, and requirements which relate to the state as a whole do not apply to Chicago. In fact, Chicago, with 24% of the state's pupils, 26% of its teachers, and 27% of its revenues, has a special section within the school code. These elements of disunity complicate the problem of good management. The reported cost of noninstructional services for elementary and secondary education in Illinois is skyrocketing, having increased 52% per pupil in only the last five years. This is reflected in the table shown below and includes administrative, attendance, health, building operation and maintenance, fixed charges, and costs of all ancillary programs connected with the regular school year. This does not include capital expenditures and debt retirement, or those support funds flowing from the General Assembly directly to school systems, but not reflected in their financial reports, in the amount of $150-million to $200-million.

NONINSTRUCTIONAL COSTS OF EDUCATION

	Total (millions)	Cumulative Increase	Cost Per Pupil	Cumulative Increase
1970-1971	$720.1	68%	$343	52%
1969-1970	627.8	46%	301	34%
1968-1969	577.6	34%	283	26%
1967-1968	535.6	24%	268	19%
1966-1967	489.9	14%	248	10%
1965-1966	429.0	—	225	—

The most dramatic increase, perhaps, has been in the last year, when such costs rose 14%. In Chicago alone, the increase was 23%. In fact, $0.44 of every $1 is used today in our schools to supplement the $0.56 allocated for teaching. Such costs have the tendency to increase effortlessly, but for control purposes are difficult to segregate and scrutinize.

Local taxpayers seem to think that the time for control has arrived. The record of tax referendums which have been defeated, shown in the table on the next page, points up the voters' increasing reluctance to assume escalating costs without question.

REJECTED TAX REFERENDUMS

Year	Educational Fund Tax Rate Increases	Building Fund Tax Rate Increases and Bonds
1971	72%	51%
1970	63%	51%
1969	54%	41%
1968	51%	38%
1967	43%	32%

Despite local taxpayer attitudes, outlays have continued to climb. While total operating costs rose 45% from fiscal 1967 to 1971, net capital outlays increased 124%. Local districts have resorted to issuing tax anticipation warrants and teachers' orders (script)—borrowing against future years' tax income to pay current expenses. This avoids requiring taxpayers' approval. In perspective, net capital outlay in 1970-1971 amounted to more than $265.5-million (in addition to regular operating costs) while warrants and teachers' orders issued totaled about $395-million.

As the financial dilemma becomes more acute, we are demanding more. Thus, we are faced with the apparent contradiction of the public demanding more quality in education, yet reluctant to pay the bill.

It is our belief that educational expenditures can be reduced. In attempting to assist in reducing these costs, the task force examined the business policies, practices, and procedures of public education and compared the financial results with those commonly achieved by successful business organizations in the private sector.

It is hoped that the survey and analysis of the management practices of the state school system does not end with this report. In the short period of time in which this report was created, it was illustrated that much more remains to be done. If all interested individuals and groups will work toward a common end, there is a rare opportunity to:

- Increase the return to school children on the tremendous investment of resources in teachers, administrators, dollars, and buildings.
- Strengthen the school system by eliminating inefficiency as well as improving management and unifying direction.
- Place the administration of our schools on a sound, businesslike basis.

Administration

The 1970 Illinois Constitution authorized a State Board of Education with authority to establish educational goals, determine policies, provide for planning and evaluation, and recommend financing. Additionally, when the board is created, it will be responsible for appointing a chief educational officer, effective January 31, 1975. The current Superintendent of Public Instruction will be the last official to be elected to this position.

At present, the superintendent is charged by the Illinois School Code with supervising all public schools in the state. He discharges this responsibility through the Office of the Superintendent of Public Instruction (OSPI). Statewide policies and procedures are transmitted to local districts through regional superintendents in each of the state's 102 counties. Management of education in the 1,140 school districts is the responsibility of the district boards of education. The local boards are responsible for employing superintendents to administer school affairs in accordance with local and statewide policies and procedures.

The Superintendent of Public Instruction has a staff of 1,025 organized into five divisions, 13 departments, and 71 units. Principal divisions are indicated on the present organization chart shown to the right.

Expenditures for OSPI activities are approximately $12-million annually, exclusive of administrative costs reimbursed under various federal programs. Except for certain academically oriented programs, services provided to local districts are regulatory and designed to control procedures in the areas of teacher certification, school recognition, and state and federal aid.

Distribution of such aid is one of the most important financial functions of OSPI. Nearly $1-billion will be distributed in the current year. Allocations are predicated upon adherence to standards of recognition by local districts. While these are being scrutinized with a view toward emphasizing qualitative criteria, 12 districts do not meet prescribed standards and an additional 22 are in a conditional status. State aid, however, has not been withheld to secure compliance, although such action appears to be required by law and is the basis for currently contemplated changes in recognition standards.

Administration of more than 40 state and federal aid programs is one of the more important functions

PRESENT ORGANIZATION
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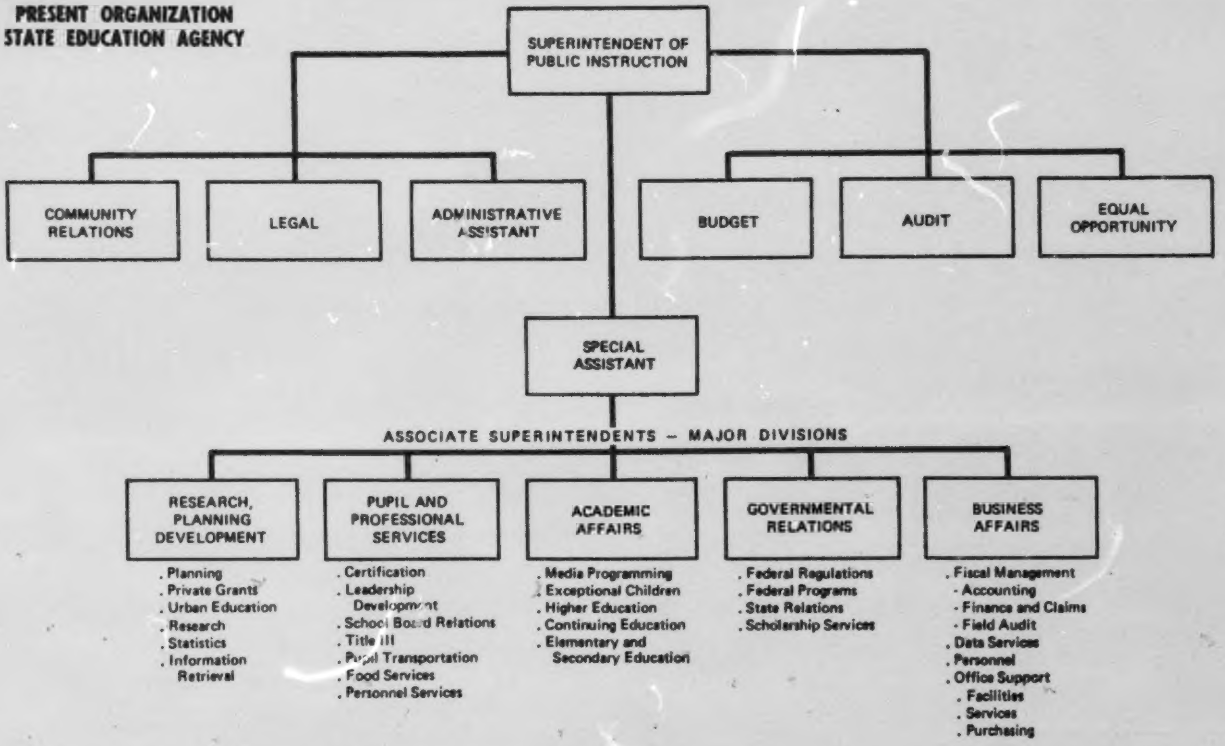
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. Services
. Purchasing

within this office, but one which is totally fragmented. While claims under the Common School Fund are processed through the Finance and Claims Section, each federal aid program is administered by a separate unit as are the various state categorical aid funds.

The Audit Section is seriously behind its legally required schedule in conducting district field examinations of aid claims. Districts in 32% of the counties have not been audited for more than three years. An additional 15% have no record of audits performed at any time.

During the past year, much of OSPI's activity has been an attempt to define the broad educational goals mandated by the new Constitution. Through public hearings, consultations, and extensive research, educational objectives have been identified and reduced to specific goals. Emphasis has been placed on the means and timing of implementation for the goals, which are long-range in nature. These plans are designated *Action Goals for the Seventies.* Initial priorities have been established to lend support to particular action goals which have early deadlines for accomplishment.

OSPI attempts to implement statewide educational policies and procedures through 102 Superintendents of Educational Service Regions (ESR), formerly called County Superintendents, who provide liaison with the local districts. The regional superintendents are elected officials responsible to county boards of trustees. Their duties consist of functional supervision and control of local districts, district and regional report processing, and distribution of state and federal aid funds received through OSPI.

A revision of the Illinois School Code provides for a phased reduction of these offices to an estimated 70 in 1973 and 35 in 1977. This will be done by enlarging regions to conform with minimum population density requirements.

Salaries of the ESR superintendents and their assistants are established by the General Assembly and paid by special state appropriation. Supplementary salaries and other staff and office expenses are paid by the regions from county tax funds. It is estimated that such costs amount to approximately $7.5-million annually.

Local boards of education are the governing bodies of the school districts. They are charged with administration of the educational program. Outside of a few charter districts, including Chicago, the Illinois

School Code specifies that members be elected. Their responsibilities include:

- Appointing teachers and fixing salaries.
- Adopting and enforcing rules governing school management.
- Directing branches of study to be taught.
- Establishing policy and procedures.
- Approving budgets and purchases.
- Letting contracts.
- Levying taxes.

Most districts have organization charts of some type. Many are not up-to-date and most do not receive widespread distribution to district staffs so reporting relationships are understood. Position guides which describe the authority and responsibilities of administrative personnel are rare. In cases where they do exist, they are frequently not in the possession of the employee performing the job.

Few boards have established a planning function or set goals to reach objectives. As a result, most find themselves reacting to events. Those which have formal, written financial and capital outlay plans with appropriate provisions for implementation, have achieved important successes in these areas.

District superintendents are employed by local boards and charged with operating the district in accordance with policies and procedures set by the board and the Illinois School Code. In addition to his administrative duties, the superintendent makes recommendations concerning policy, budgets, building plans, site locations, staff selection, courses of study, textbooks, and instructional materials to his board.

Most superintendents come from the teaching ranks and this is valuable in many areas of responsibility. On the other hand, the success of the district operations depends heavily on the administrative ability of the superintendent. In larger districts, superintendents generally manage their jobs effectively. In some medium and small districts, problems outside of the instructional area do not receive sufficient attention.

The size of the administrative structure reporting to the superintendent varies. However, it is apparent the business management function is a key one. In practically every instance, a teaching credential is deemed a requisite for this position while skills or background in the business essentials of the job are not assessed.

Administrative costs of local districts, as reported to OSPI, for salaries, contractual services, supplies, travel, and miscellaneous were almost $90.9-million for fiscal 1971. This accounts for 4.1% of net current expenditures compared with a national average of 3.8%.

An analysis of the size of local districts indicates that there is an uneconomically high proportion of very small school districts in Illinois, measured by ADA (Average Daily Attendance). School districts can be classified as follows:

Over 500,000	1
40,000	1
20,001 to 25,000	3
10,001 to 20,000	15
5,001 to 10,000	44
1,000 to 5,000	332
Less than 1,000	744
Total	1,140

A review of noninstructional expenses in the various districts indicated such expenditures amounted to 44.5% of total costs in the 744 districts with less than 1,000 pupils (ADA). This ratio dropped sharply to 38% in districts of 1,000 to 5,000 pupils (ADA). The share of educational dollars spent for instruction increased proportionately in the larger districts.

Educational cooperative districts are another administrative and operating unit in the educational structure. They are formed by two or more local districts where individual enrollments do not justify special program operation. Cooperatives are most frequently found in special and vocational education areas. They also are formed for purchasing, data processing, transportation, and other mutually advantageous projects. At present, there are between 150 and 200 cooperative districts in existence.

Generally, cooperatives employ a director or special superintendent plus their own teaching, administrative, and clerical staffs. Costs are paid pro-rata by the participating districts. Cooperatives are required by law to submit special annual financial statements and most do. However, the data are not summarized by OSPI. Therefore, the functional costs are not included in the published operating expenditures of Illinois school districts.

EVALUATION

Inadequate business procedures in OSPI result in indecisive department roles, conflicting responsibilities, and overlapping functions. Almost without exception, the administrative structure is manned by educators who are not primarily concerned with business management. Thus, OSPI has been unable to respond adequately to service requests from local districts. District problems which require state level assistance include data processing, planning, legal aid, labor negotiations, purchasing, building construction, financial planning, and capital needs assessment.

Although OSPI is charged with the responsibility of supervising all public schools in accordance with the Illinois School Code, and adequate legal provisions are available to secure compliance with standards and procedures, little enforcement effort appears to be made. No effective validation techniques are practiced in processing aid claims. This can effectively allow free state loans, and often results in overpayments. Currently, one large district has a reported deficiency of $18-million resulting from attendance reporting errors, and one of $15.7-million caused primarily by changes in assessed valuations. No policies exist to govern repayment procedures except negotiation. Both the field audit and claims processing staffs are inadequate and ill-equipped to carry out their assigned responsibilities.

Accounting and financial practices are inadequate to assess and control the expenditure of resources. Plans have been initiated for program budgeting, unit cost control, and management-by-objectives to achieve improved internal OSPI performance. However, these activities are not yet operative or sufficiently matured to have had an impact. Specific problems include:

- Inadequate accounting records and controls.
- Ineffective cash receipt and disbursement control methods.
- Patronage practices in the staffing of department positions.
- Low levels of competence in jobs requiring sound business skills.
- Lack of objective job performance criteria.

The OSPI study, *Action Goals for the Seventies,* amply delineates educational goals and objectives. However, it does not discuss the cost of development or implementation.

The size and resources of district administrative staffs surveyed varied considerably as did the ability of the personnel. Basically, certification, tenure, and educational attainments were the principal selection criteria. Job requirements were frequently overlooked and educational backgrounds were the controlling factor. This has resulted in salaries primarily commensurate with educational levels of individuals rather than with their job qualifications.

Board policy manuals need improvement. Many were not current and few provided cross-indexing between policies and procedural directives. In districts where position guides are used, they have proven extremely helpful in assessing staff requirements and evaluating performances.

Clerical assignments are rarely examined to determine work loads, simplify routines, rearrange work flow or avoid duplications. A significant amount of clerical time is spent accumulating data for reports. This activity should be examined in terms of need and benefit to avoid duplications and unnecessary costs.

The lack of uniform record retention and filing practices results in a variety of systems and paper handling methods among the districts.

Each cooperative has one administrative district legally responsible for its actions. However, no effective control appears to be exercised by the governing or member units in terms of quality or cost. An analysis of district sizes indicates there is an uneconomically high proportion of very small districts, particularly those with an ADA of less than 1,000, where consolidation is geographically, economically, and sociologically feasible.

RECOMMENDATIONS

1. Reorganize the administrative functions of the Office of the Superintendent of Public Instruction to fix responsibility and accountability for business management.

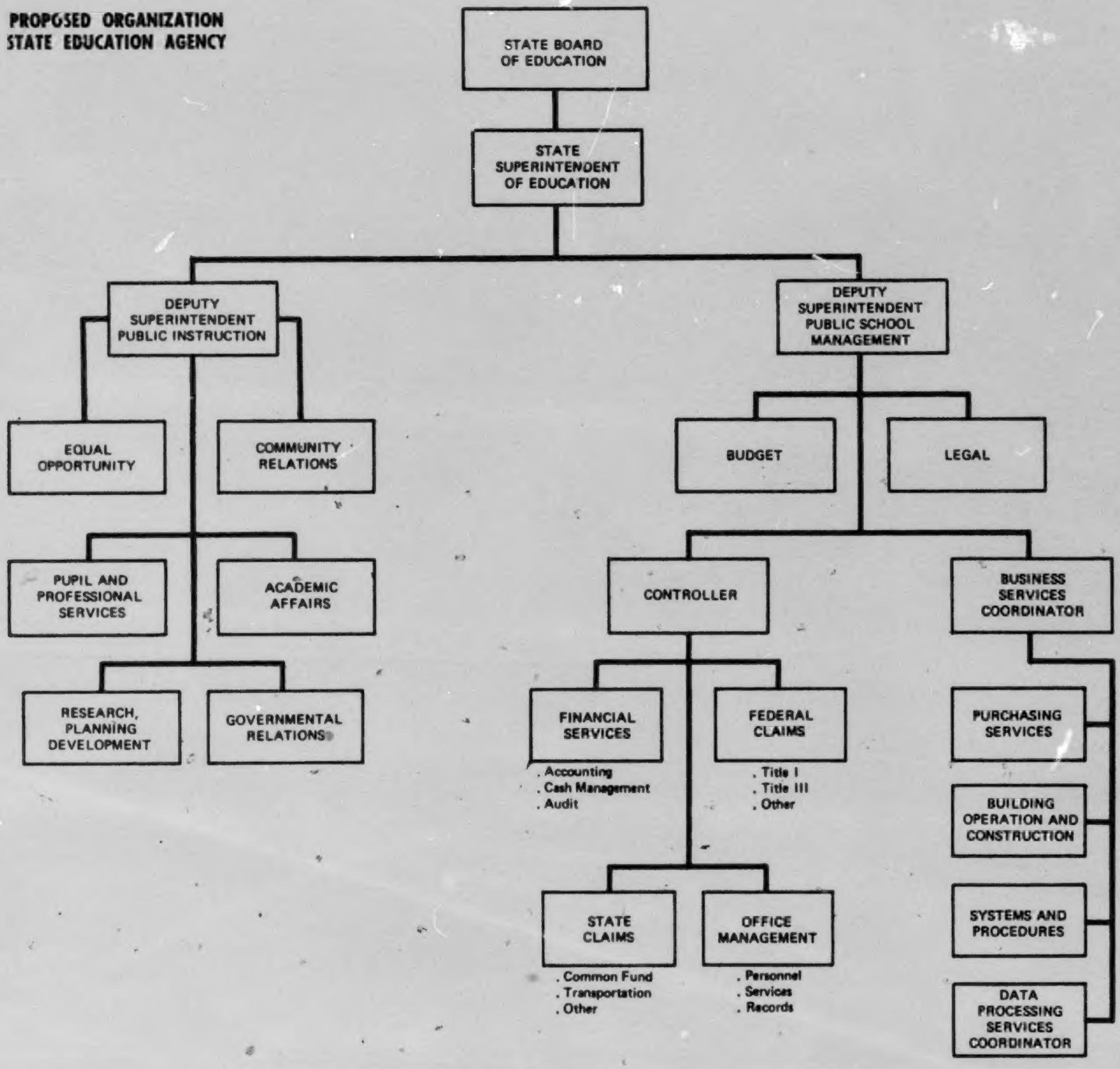
Effective business management abilities are lacking in the present OSPI structure. Also, there is insufficient attention paid to cost versus benefit concepts. Consultive support for local districts in the area of business management is meager or nonexistent. This results in inconsistent district practices, unnecessary expenses, and duplication among districts in the development of administrative programs. The business management areas within OSPI should be segregated and structured as shown in the proposed organization chart on the following page.

Like responsibilities have been grouped together. They have been segregated from the educational functions of research development, implementation, and liaison and would report to a new position of Deputy Superintendent of Public School Management.

Departments responsible for the major functions of processing federal and state aid claims have been segregated and enlarged. A department controller is recommended to supervise all financial and claim activities. Also, a business services coordinator is suggested to provide state-level assistance to districts in nonacademic areas. He would coordinate the development of and supervise support systems within OSPI. If adequate state facilities exist in other departments, he would act as liaison for the districts.

Benefits to be gained from the reorganization include fiscal and administrative accountability, avoidance of duplicated service costs now incurred by districts, and

PROPOSED ORGANIZATION STATE EDUCATION AGENCY


STATE BOARD OF EDUCATION
STATE SUPERINTENDENT OF EDUCATION
DEPUTY SUPERINTENDENT PUBLIC INSTRUCTION
EQUAL OPPORTUNITY
COMMUNITY RELATIONS
PUPIL AND PROFESSIONAL SERVICES
ACADEMIC AFFAIRS
RESEARCH, PLANNING DEVELOPMENT
GOVERNMENTAL RELATIONS
DEPUTY SUPERINTENDENT PUBLIC SCHOOL MANAGEMENT
BUDGET
LEGAL
CONTROLLER
BUSINESS SERVICES COORDINATOR
FINANCIAL SERVICES
. Accounting
. Cash Management
. Audit
FEDERAL CLAIMS
. Title I
. Title III
. Other
STATE CLAIMS
. Common Fund
. Transportation
. Other
OFFICE MANAGEMENT
. Personnel
. Services
. Records
PURCHASING SERVICES
BUILDING OPERATION AND CONSTRUCTION
SYSTEMS AND PROCEDURES
DATA PROCESSING SERVICES COORDINATOR

availability of adequate support services. There is also provision for business-oriented management of functions delegated to the State Superintendent of Education by the State Board of Education.

2. Consolidate districts with an average daily attendance of 1,000 students or less.

At present, 744 of the state's 1,140 school districts have an average daily attendance (ADA) of 1,000 students or less. These smaller districts spend 16% more of their total educational funds on noninstructional activities than do larger ones.

Consolidation into or annexation with districts of from 1,000 to 5,000 ADA will save approximately $6.4-million annually in noninstructional expenditures. In addition, implementation will afford an opportunity for strengthened management in the resulting districts as well as provide improved state and regional assistance by decreasing the number of contacts with the districts.

3. Accelerate the reduction of Superintendents of Educational Service Regions to 12 by the end of 1973; make the position appointive by the State Superintendent of Education with approval of the State Board of Education; and define the services to be rendered, establishing appropriate selection criteria.

This position is a holdover from the time when counties primarily governed the schools. No meaningful administrative services are rendered which are not available from other sources. The current practice of channeling reports, papers, and aid monies through the superintendents hampers the orderly flow of information and money between OSPI and the local school districts.

Therefore, the planned reduction of personnel in these positions should be accelerated. Implementation will provide an annual saving of $2.3-million to the state. An additional saving of $1.8-million will be realized by the counties which now pay for support staffs. Making the remaining superintendent positions appointive and redefining their responsibilities will assist administrative implementation of educational policies, fix accountability, and help improve communications between OSPI and the local districts in the state.

4. Create an independent legal entity to replace existing cooperative districts.

There are 150 to 200 cooperatives in Illinois functioning in various educational program and non-instructional activity areas. Cooperatives generally employ separate management, instructional or technical, and administrative staffs. Costs are paid pro-rata by participating districts, but not included in the annual functional analysis submitted to OSPI by those districts. While most comply with the legal requirement to submit annual financial reports to OSPI, there is no state-level analysis of the information. Consequently, data needed for proper management of cooperative activities are lacking. There is considerable concern among local officials concerning spiraling costs in certain program areas.

Therefore, cooperatives should be structured as separate legal districts. They should be independent of their participating districts and report to the State Board of Education through the regional offices in the same manner as required of all other districts.

At the state level, the same attention should be given to both local and cooperative district reports. In this manner, effective controls will be instituted to ensure satisfactory performance and control costs.

5. Develop and publish a study of the costs associated with the implementation of its *Action Goals for the Seventies.*

Educational goals and objectives for Illinois have been comprehensively defined in a recent OSPI publication, *Action Goals for the Seventies.* However, no effort has been made to determine the cost of development and implementation or methods of financing.

A study of each major set of goals should be made by an independent consulting firm to define the expense of implementation as well as alternative methods of financing. As goals are analyzed and costs and financing plans established, benefits can be weighed to permit a logical establishment of priorities.

6. Require the Auditor General to conduct an annual management procedural audit of the school system.

Annual fiscal audits are required of all administrative units in the school system, including local districts. However, no procedural audits are performed. This leads to the introduction and perpetuation of poor business practices which can have adverse effects on the system's financial condition.

The Auditor General should develop a procedural audit program for use annually in evaluating procedural compliance and effectiveness. It should be updated as often as necessary to keep it current. Audits should be performed annually in the Office of the Deputy Superintendent of Public School Management, and in a selected number of Educational Service Regions and local districts. The use of procedural audits will provide managers of school administrative functions with needed measures of performance.

7. Strengthen the OSPI internal audit function by employing a professional staff qualified in accounting, systems and procedures, and business management.

To exercise effective management control in an operation employing more than 1,000 people and responsible for disbursement of over $1-billion annually, systems and procedures documentation is required. At present, procedures are rarely written, job responsibilities and authority lack definition, and work flow is generally not charted.

Professional staffing and direction of the internal audit function will result in the needed management review of department operations. Combined with fiscal and procedural audits by independent public accounting firms, internal management reviews will provide the necessary yardsticks to measure management performance.

8. Develop uniform auditing and financial reporting requirements within OSPI for annual school district audits.

State guidelines are needed in auditing scopes, standards, and reporting techniques. External auditing efforts will be improved by providing improved instructions which include:

- A minimum program of examination or audit scope.
- Adequate auditing requirements.
- A detailed internal control questionnaire.
- A uniform financial reporting format containing expanded supplementary data on districts.
- A requirement for annual preparation for a management letter of recommendation covering internal control weaknesses or deficiencies.

Provision should be made for annual review and revision of these minimum auditing and financial reporting requirements. Audit efforts and reports should be regularly received and reviewed to make more informed appraisals and evaluations of performance and assist in establishment of further auditing improvements.

9. Have attendance and claim reimbursement audit work performed by independent public accounting firms.

Approximately 50 OSPI personnel are engaged primarily in audits of attendance data or reimbursement claims for state and federal funds. OSPI has no record of audit efforts in about 15 counties. These auditing functions could be more regularly, efficiently, and economically performed by CPA firms in conjunction with regularly prescribed district audits.

The present annual budget of this OSPI department is $723,000. Upon implementation, that amount will be saved. Annual costs of $361,000 to the districts are anticipated.

10. Initiate a statewide records management program.

Local districts function with retention schedules that are more than 10 years old. As a result, the tendency is to retain file material well beyond the time necessary for reference or legal purposes. A statewide records management program, including a document retention schedule, should be established and distributed to all school districts. Storage of data which has outlived its usefulness represents unnecessary costs in terms of space and equipment.

11. Adopt a planned program of orientation and training to improve the performance of local school board members.

Generally, new board personnel lack sufficient background in school operations to make effective contributions especially in their first year. The local superintendent and his staff rarely have time to devote to new representatives.

Indoctrination workshops are available and new members should be encouraged to attend them. Further experience could be gleaned by all personnel if they were to spend two or three days annually visiting schools in the district. Having board members well versed in school operations will result in a more effective management team.

12. Eliminate the requirement for annual publication of local district expenditures in newspapers.

The Illinois School Code requires annual publication of district expenditures. Publishing these data adds nothing to the control of the business operation and is of questionable value to the public. More meaningful financial summaries are frequently released in connection with community or public relations programs in the districts. Therefore, the requirement should be eliminated. An annual saving of $1.14-million in publication and copy preparation expenses will be realized statewide.

Money Management

During the past decade, corporate and institutional money managers have become increasingly aware of the earning power of cash. When short-term investments were worth only 1% to 2% per annum, bank balances were generally ignored. Checks and cash in transit from payer to use by payee were not even considered. Bank balances were practically ignored as a source of revenue. However, in recent years, investment factors have changed as depicted in the table to the right.

As the demand for short-term credit increased, resulting in a sharp advance in rates, astute financial managers in the private sector reexamined their accounts

COMPARATIVE INTEREST RATES

	1941	1951	1961	1971	August 1972
U. S. Treasury 90-Day Bills	0.10%	1.55%	2.38%	4.35%	3.84%
Bankers' Acceptances	0.44%	1.60%	2.81%	4.85%	4.87%
Prime Commercial Paper	0.54%	2.16%	2.97%	4.91%	4.74%
Bank Savings Rate	2.00%	2.00%	3.50%	4.50%	4.50%

receivable procedures, methods of check collection, bank deposit levels, and the very nature of their investment portfolios. Management techniques now include cash flow forecasts, lock-box collection methods, bank wire transfers, multiple check routing, advanced use of computers through check encoding, bank certificates of deposit, repurchase agreements, and the like. The object is to reduce accounts receivables, processing delays, convert checks-in-transit to funds in the money markets, and available funds into investments at optimum interest rates.

The school system's principal receivables are property tax revenues, federal grants, and state aid. Therefore, the task force reviewed the methods of collecting and transmitting these receivables to the districts' banks of deposit, and the amounts of money in this pipeline at various times and conditions. On an annual basis, these studies indicated:

- Over $800-million in state funds are delayed in transit on an average of 81 days.
- More than $150-million in federal monies are slow by 92 days.
- About $1.5-billion in property taxes are held up for 56 days.

Additionally, it was noted some $80-million to $85-million in protested taxes are currently held in escrow and will not be paid to the schools until the protests are settled. Also, millions in penalties assessed for late tax payments, at 1% per month, are not paid to the schools.

An analysis of liquid assets controlled by the districts showed:

- Over $250-million, on an average daily basis, is idle in checking accounts of the districts.
- While a majority of districts invest a large proportion of their excess cash in short-term securities, their rate of return is below market average.

The effective interest rate paid by local districts for issuing school bonds currently ranges from 4.5% to 7%, as compared with an Illinois State rate of up to 2% less. Similarly, attorneys' fees and rating and financial charges customarily range up to 6% of local issues, compared to Illinois general obligation bonds costing 0.10% to 0.25%. On $618-million of bonds in the past five years, the average annual surcharge for issuing local district bonds rather than state bonds amounted to $5.25-million for interest and $2.19-million for placement fees.

EVALUATION

While a number of districts, particularly the larger ones, were taking reasonable steps to maximize their cash utilization, most either felt the amounts involved were too small, were concerned about legal restrictions on bank balances and investments, or thought a satisfactory job was being done. Nevertheless, the annual cash flow from all sources today totals approximately $3-billion. The delay of receipt of these funds for only one week now costs the school districts $2.5-million.

In actual practice, based on a representative six-month sample, the avoidable delay in the transfer of funds to the districts is costing the school system in excess of $20-million annually. All in all, the schools are losing over $60-million annually through the lack of application of current business financial techniques to the area of money management procedures and programs.

Legal as well as emotional considerations prevent the co-mingling and consolidation of funds for cash flow and investment purposes. Due to their quasi-legalistic position as agencies of the state, districts do not have the legal ability, except through voluntary cooperatives, to take advantage of modern cash-flow, cooperative investment, and cooperative borrowing techniques found to be advantageous and profitable by organizations in the private sector. Tax collection and remittance methods are definitely archaic, time-consuming, and costly to the individual taxpayer and the school system. These procedures greatly limit the potential productivity of the taxpayers' investment in education.

It is recognized that if the following recommendations are implemented, from $3-million to $6.5-million of the $63-million savings to be realized will result from the transfer of interest earnings to the school system now reported primarily by the State Treasurers' office. However, responsibility and accountability will be correctly placed and the true cost of education in Illinois will be more accurately stated. Additionally, districts should not have to borrow to meet normal operating costs.

However, implementation of recommendations on property taxes, penalties, and amounts held in escrow will provide, in addition to the income claimed for the school districts, $15.4-million of annual income to other taxing bodies in the state. The recommended change in the method of collecting property taxes will add $6-million of income per year to these other tax units as well as a one-time income of $524-million.

RECOMMENDATIONS

1. Create a pooled cash and pooled investment fund to provide for immediate use of the principal sources of school system income such as federal and state aid and property tax collections, and to optimize the earning power of idle assets tied up in local district bank accounts and small investments.

School districts are losing millions of dollars annually because they borrow funds temporarily to finance state and federal aid programs as well as property tax collections until those funds are received. They are also losing additional millions through their inability to cooperatively collect and invest funds on an on-going basis at top rates. Further, there is no mechanism available to obtain the advantages of modern cash-handling and collection techniques to receive the advantage of co-mingled investment funds as found in bank savings and co-mingled trust accounts.

A partial solution to this problem can be found in the pooling of cash concept currently in use by many large corporations and trust departments of metropolitan banks. In this concept, all funds, both federal and state, are immediately placed on the due date in a common cash pool. This pool becomes the depository for all receipts and the source of funds for payments made by local districts.

Depository transfer checks are used to transfer all local receipts deposited in local banks to the pooled cash fund immediately through banking channels. Transfers from the pooled cash fund to local banks are made as needed to cover the totals of local vouchers paid. Minimal balances are kept in local banks to cover the cost of their services.

Excess funds in the pool are invested in keeping with projected cash flows for all districts. Separate computer accounts are kept for each district and earnings on surplus funds are credited pro-rata to each district, depending on its own day-to-day surplus balance available for investment.

Implementation will provide the following nine major benefits:

- Immediate transfer to the common cash pool of all state aid, on the date of payment, will increase earnings or reduce borrowing costs of the pool and the districts by approximately $2.27-million.
- Prompt payment of general state aid, when legally due, will increase earnings or reduce borrowing costs by close to $3.14-million.
- Payment of all other state aid on an as-needed basis, rather than on a reimbursement basis, will increase earnings or reduce borrowing costs by about $2.42-million.
- Immediate transfer to the common cash pool by the state of all federal aid on the date of payment will increase annual earnings or reduce borrowing costs by $446,000.
- Change in payment method of federal aid, not paid on an as-needed basis from the present reimbursement method, will increase earnings per year or reduce borrowing costs by some $1.22-million.
- Direct collection of property taxes and immediate transfer of such funds to the common cash pool will increase earnings or reduce borrowing costs by about $8.39-million.
- Property taxes should be collected through bank lock-boxes with immediate transfer of funds to the common cash pool. It is estimated that reduced collection costs at the local level will exceed the costs of centralized collection by $3-million annually.
- Investment of all daily balances now in district bank accounts in a common co-mingled investment pool will provide earnings of close to $10.62-million.
- Co-mingling of all existing district investments in a common pool will increase annual earnings by approximately $6.92-million.

Current narrowly restrictive legal investment policy must be broadened to permit investments in keeping with normal and customary business practice.

Net annual income to be derived from implementation of these recommendations is about $38.43-million.

2. Issue lower cost general obligation state bonds in lieu of local district special revenue bonds to finance local capital improvements.

It is estimated that $344-million of capital improvements will be acquired by the school system each year for the near-term future. Based on past experience, $257-million must be raised each year through the sale of local special revenue bonds by individual districts. Such local issues generally carry a lower credit rating than the State of Illinois and, consequently, a higher interest rate. The difference is estimated to be between 75 to 100 points.

Further, placement costs of local issues, which include attorneys' fees, legal opinions, printing costs, and financial fees can range from 1% to 6% of the amount of each issue. These charges depend on the size of the issue, the district's credit rating, and the placement method selected. State bonds, on the other hand, usually bear a placement cost of 0.10% to 0.25% of bonds sold.

A solution would be to replace all local district special revenue bonds with State of Illinois general obligation bonds. Local authorization can be continued by the referendum process. The proceeds of local bond tax levies can be assigned to the state to provide the basic source of funds for repayment of these general obligation bonds.

It is estimated that first year savings in interest will amount to $1.36-million. By financing buildings presently constructed by the Public Building Commission for the Chicago school system through issuance of state bonds, an additional first year interest charge of $386,000 will be saved. Over the life of one 20-year bond issue, interest savings will total $18.3-million. Interest saved annually will increase each year this type of bond is issued, and will peak at $18.3-million in the twentieth year and each year thereafter.

The State of Illinois' current debt financing programs will require that Illinois' new issues be placed on the market far more frequently than in the past. While the state will be able to market its authorized debt with a program of responsible marketing procedures, bond resources should not be considered as unlimited.

By issuing state bonds, placement costs will be minimized. Estimated annual savings of at least $2.35-million will accrue.

3. Discontinue the issuance of local tax anticipation warrants and replace them with state-issued short-term general obligation notes.

Due to timing of collecting property taxes, the principal source of school system revenue, about 40% of the districts are issuing tax anticipation warrants. As of June 30, 1971, $457-million was outstanding in short-term promissory notes payable from the next year's tax collections. In fact, 30 to 40 districts including Chicago are borrowing against tax collections for two years in the future. The interest rate applicable to local warrants or notes is higher than would apply to state-issued short-term general obligation notes.

The issuance of local tax anticipation warrants should be discontinued and replaced with state-issued short-term general obligation notes. Short-term state notes will carry an interest rate substantially less than the average of local warrants. This rate differential will result in annual savings to the local districts totaling about $5.67-million.

4. Discontinue the legal authorization for the issuance of teachers' orders.

As cash is in short supply in a number of districts, they have been forced to borrow against future tax levy income. Some districts issue tax anticipation warrants. Others are issuing script to their teachers in lieu of cash or checks in payment of salaries. This is simply a promissory note which is payable at some future date with interest at rates of up to 7% per annum.

A number of districts are issuing teachers' orders when they have no tax anticipation warrants outstanding because local banks find it more profitable to finance such orders at 6% to 7% interest rather than anticipation warrants at 3.5%.

Therefore, legal authorization for the issuance of teachers' orders should be discontinued. The replacement of $6.9-million of teachers' orders with tax anticipation warrants will reduce interest costs by $207,000. Further, it will benefit the teachers by requiring they be paid with checks rather than negotiable promissory notes.

5. Change the payment plan for local property taxes to a pay-as-you-go basis, with one-twelfth of the tax due on the 15th day of each calendar month beginning January 15.

About 30% to 35% of annual property taxes are paid during the first half of each year, usually in June. Most of the balance becomes available during the September through November period. However, the school system has teachers to pay, and other operating expenses to meet every month of the year. This method of tax collection forces many districts to borrow against future tax collections to pay current operating expenses or levy taxes higher than necessary to build cash reserves to meet those obligations as they become due.

The present method often works hardships on individual taxpayers who program their income to meet expected monthly expenses but cannot budget to meet an unknown large semiannual payment. It also grants a windfall to financial institutions who grant mortgages only if the mortgager deposits the estimated annual tax bill with them monthly on a pay-as-you-go basis. Such escrow deposits are retained by the financial institutions and are paid to the various tax collectors on the due date. Thus, the institutions, not the districts, have the use of these deposits.

Therefore, the property tax payment plan should be changed to a monthly pay-as-you-go-basis. The first six payments would be estimated based on the prior year's taxes. The last six would be adjusted to reflect the actual tax less the payments made in the first half year. This change in method will enable the school districts to plan their tax receipts on an approximately equal monthly basis throughout the year. The net advance in timing is 60 days, and most of this will be as a result of institutional mortgage-holders remitting tax deposits as received.

Individual taxpayers, used to regular periodic payment of social security as well as federal and state income taxes through withholding, will be better able to meet this increasingly heavy tax bill.

The change in the timing of such tax receipts, based on 1970-1971 tax collections, will result in additional income to the districts of about $5.58-million principally from reduced borrowing. Furthermore, by starting the plan on September 15, after the second half of the taxes in the year of conversion are due, the districts will pick up a one-time revenue gain of $490-million. Costs associated with implementation have been included elsewhere in the calculation of benefits to be gained.

6. Pay the local school districts their portion of all penalties collected for late payment of real estate and personal property taxes levied by them.

Real estate and personal property taxes are due twice each year at specified times. If paid after the due date, a penalty of 1% per month or fraction thereof is collected. However, penalty fees are not remitted to the districts for which the taxes were levied. As a result, they lose the use of the tax revenue, are denied the penalty imposed for late payment, and are forced to borrow money to operate. Other taxing bodies, through historical precedent, receive the economic use of the tax funds rightfully belonging to the school system.

Therefore, all penalties collected for late payment of real estate and personal property taxes levied for schools should be paid to these districts. Based on an analysis of late tax payments, as deposited in the bank accounts of a representative number of districts, implementation will transfer about $3.08-million annually to the school system.

7. Increase the penalty for late payment of real estate and personal property taxes to 2%.

When the notion of a penalty was first conceived, normal credit customarily used by most taxpayers cost 6% a year. Therefore, a late charge of 1% per month or 12% per year represented a true penalty. Today, with revolving credit at 1.5% per month or 18% per year, a rate of 12% no longer represents a penalty. In fact, it is cheaper to pay one's revolving credit charge, delay payment of property taxes, and save 6%.

Therefore, the penalty for late payment of property taxes should be increased from 1% to 2% per month or fraction thereof. The charge for late payment would once again be a penalty, since it would be greater than for late payment of other credit accounts. An increase in the penalty rate will probably not speed up tax payments.

For example, experience by many banks in increasing bad check charges from $0.25 to $2 or $3 has not decreased the number of bad checks written. It has merely increased the revenue of the banks taking this action. The change in the penalty rate to 2% per month will increase total revenues by approximately $3.08-million per year.

8. Eliminate the practice of placing in escrow those taxes which are paid under protest.

Taxes paid under protest are held in escrow by the tax collecting body and not remitted to the school districts until the protests are settled either administratively or legally. Alternately, an amount equal to 1% of total taxes collected can be held in escrow to protect those taxes paid under protest from being spent by the taxing body, and hence not available for rebate to the protesting taxpayers. This results in additional borrowing by the affected districts. Of recent concern are court decisions holding that all personal property taxes for 1971, collected in 1972, must be held in escrow pending the outcome of certain legal suits.

Therefore, the practice of placing protested taxes in escrow should be eliminated to provide these funds to the school districts. Such protection is unnecessary and costly to the districts deprived of the use of these tax revenues. School districts have the right under law to levy taxes each year to meet budget requirements within applicable limits. Legal and fiscal protection can be given to protesting taxpayers by a statutory lien on the first future tax collection imposed by the districts after such protests have been amicably settled.

The release of these funds held in escrow will increase earnings of the districts by $156,000 resulting from reduced borrowings. The further release of 1971 personal property taxes, collected in 1972, will make available to the districts $80-million. This will earn an additional $3.44-million per year until the matter is adjudicated.

Federal-State Aid Programs

Under the Illinois Constitution, the state has the responsibility for providing education. However, in practice, the General Assembly has largely delegated this responsibility, including the financing of education to local authorities. Historically, the base of local taxation was ownership of property, the value of which tended to vary widely between localities. It was determined early in the state's existence that assistance in the form of grants should be provided to equalize educational opportunity between localities.

State aid, thus, dates back to 1825 when the Free School Act appropriated 2% of all Illinois Treasury receipts for the use of free schools. The beginning of state tax support, however, was in 1855 when a tax of two-mills per dollar was levied on the assessed valuation of all properties. It was producing about $900,000 a year in 1873 when a flat appropriation was substituted for the levy.

Since 1911, the General Assembly has increased this appropriation each year, with the exception of 1933-1935, to the current figure of $1.096-billion for 1972-1973, or about 38% of total school costs.

The General Assembly annually makes appropriations to the Common School Fund from which distributions are made by the Superintendent of Public Instruction. This is in keeping with legislative formula to local districts for the major school aid programs. In addition, various categorical aid monies are appropriated for school programs. The growth of total state aid is shown in the table below.

STATE AID
(in millions of dollars)

	1968-1969	1970-1971	Per Cent Increase
General State Aid	$379.8	$703.0	85%
Special Education	23.7	36.3	53%
Transportation	13.4	27.7	107%
Vocational Education	5.2	11.3	117%
Summer School	4.0	7.9	98%
Adult Education	4.7	7.4	57%
Driver Education	6.1	6.9	13%

While the type of state aid claim dictates the data districts must report or submit, the common component for many claims is pupil population, frequently on an average daily attendance basis. The result is a substantial effort to obtain, process, and verify it. In all districts except the very smallest, claim applications and essential report data are prepared and submitted by the individual in charge of the district function. Likewise, claim processing at the state level is fragmented by function except for those on the Common School Fund.

While education continues to be a state function, federally supported programs have begun to play an important part in local school financing. Almost all federal funds are categorical in nature. They support a particular type of program, the dimensions and accountability for which are delineated by the U.S. Office of Education.

Federal aid for Illinois education totaled $154-million in 1970-1971. Of this amount, $61-million, or 40% was secured under Title I of the Elementary and Secondary Education Act of 1965, mainly to meet educational needs of deprived children from low income families. In addition, other major federal support funds for the 1970-1971 year were Lunch Program, $25.7-million; Vocational Education, $11.3-million; Economic Opportunity, $9.9-million; and Title III ESEA, $4.8-million.

Virtually all districts participate in the Title I program for the education of children from low income families. Other title programs under ESEA and the National Defense Education Act are designed to stimulate new programs or supplement existing ones for children regardless of economic status.

Those districts which participate in other than Title I have one or more administrators assigned to coordinate efforts to secure federal funds. Many districts do not participate due to a variety of reasons. These include lack of knowledge, time, and manpower necessary to prepare program applications for approval, and uncertainty of funding and timing of applications for submission requirements.

EVALUATION

General state aid is disbursed based on the current year's legislative formula applied to components using data from the previous year. District budgets are then prepared using anticipated fund revenue. Adjustments are made at the beginning of the next year to reflect applications of formula to current data. This results in plus or minus adjustments which occur one year after the tentative aid has been received and spent.

This often causes financial hardship in the next year and results in less meaningful budgets. The situation has become so acute that the last General Assembly amended the formula to allow use of either current or one-year old data in computing payments, whichever resulted in the greater payment.

Several districts find that programs mandated by the General Assembly are not always accompanied by the funds required for implementation. Further, payment for state aid supported programs is received after the fact requiring the districts to engage in deficit financing until receipt of funds from the state.

Many federal programs are on a reimbursement rather than a grant basis. This inhibits district participation and further contributes to deficit financing problems. Generally, the larger districts with sufficient resources assign full-time personnel to seek federal funds. They secure the largest share and districts with perhaps greater needs, lose out.

RECOMMENDATIONS

1. **Eliminate the practice of recomputing general state aid and adjusting payments to local districts.**

Budget preparation by local districts is a laborious and lengthy process. A significant portion of revenue is predicated on the state aid claim formula which includes variable components subject to revision subsequent to budget adoption. This makes the budgeting process a guessing game. The state aid claim should be allowed to stand subject only to adjustment which may result from an audit verification of accuracy. This procedure would result in more valid district budgets and resource allocations.

2. **Provide expanded state-level facilities to assist the local districts in federal program participation.**

Except in some large districts, the superintendent and the administrative staff generally do not have sufficient expertise to appraise or be aware of the numerous federal programs. No source exists at the state or federal level which compiles data on available aid programs for district use.

Preparation of a manual which would include guidelines, objectives, type of aid, eligibility requirements, and applications would provide necessary source data. In addition, expansion of state counseling facilities would fill the important need to aid in district appraisal of anticipated benefits versus effort required for successful program implementation.

3. **Urge review and appraisal of federal programs now on a reimbursement basis to determine if they would be more effective and used more widely if changed to grant type aid.**

Reimbursement type aid requires commitment of district funds for expenditures under those programs. Many districts are so short of revenue, which must be advanced until payment is received, that they cannot take advantage of the programs. Personnel involved in federal program administration should continue to seek grant type aid on a state basis. This would result in increased participation of districts needing federal revenue and enhance the purpose of the programs.

4. **Accelerate aid payments under state programs in order to provide funds for local districts on a pay-as-you-go basis.**

District funds are expended for state-supported programs throughout the school year. Reimbursement for claims is received at various times during the year or after the year end depending on the particular type of support. This places the district in the position of advancing funds until payment is received and may result in forced borrowing or actual termination of programs if funds are not available.

All monthly state aid payments should be made at the beginning of the month as the code provides instead of at month end. Other payments should be made no less frequently than quarterly throughout the year. By speeding up the receipt of funds to provide reimbursement as district expenditures are incurred, state aid programs would provide the type of assistance for which they were intended. Benefits of implementation are claimed elsewhere in this report.

Systems and Procedures

Generally, existing systems and procedures have been designed to fit the needs and/or policies of particular districts. State-level assistance has been almost nonexistent. In most districts, systems and procedures design has been restricted to basic matters as payroll, accounts payable, budget performance reporting, and the like to the exclusion of important areas such as food services, transportation, insurance, personnel, and forecasting.

The size of most districts, combined with their financial condition, precludes extensive individual systems efforts. In many instances, districts have expanded systems development efforts which duplicated those of others throughout the state. The absence of state assistance virtually eliminates the possibility of improvement except through cooperative arrangements among contiguous districts.

Some districts have hired outside consultants to perform systems studies. These activities have reportedly proven beneficial and, as a rule, resulted in substantial savings. Several districts, through use of their computers, have developed somewhat sophisticated systems of accounting and budgeting.

EVALUATION

The responsibility for systems and procedures in most larger districts is delegated to the business or office manager. Most of them are former teachers and have had little business experience.

The extent of systems development and the degree of sophistication varies considerably. In districts with available expertise, satisfactory progress has been made in devising and installing adequate systems and procedures. As a general rule, however, overall systems efforts are not integrated within the districts and underlying procedures are developed on a fragmented basis. Most systems are not documented in accordance with accepted business practices.

The lack of standards and absence of assistance from the state make it impossible to develop systems at the local level which are flexible enough to apply to various districts while maintaining data commonality.

RECOMMENDATIONS

1. **Establish a state-level Systems and Procedures Department to develop systems guidelines, office practices, and equipment standards for the districts.**

The lack of a competent systems development group in the state has led to poor systems concepts and design at all levels. The districts do not have the financial resources to solve the problem and local personnel do not possess the required expertise.

To provide the assistance needed, a Systems and Procedures Department should be established by the state. This department can accomplish substantial savings in several areas. For example, a statewide clerical work improvement program should reduce district staffs by one to three employees in those areas with more than 2,000 students. The annual saving to be realized through reducing clerical help by only one person in each of 120 districts would be $936,000.

The department should also be responsible for statewide forms control. If the state designed and printed commonly used forms, the saving in printing costs alone would exceed $750,000 per year.

Standardized equipment procedures would produce additional benefits. Many items purchased by the districts could be obtained more economically with state-level assistance. For example, photocopying costs could be reduced by more than $100 per month in at least 35% of the districts. The annual saving to be achieved would be approximately $500,000.

Current office practices also offer opportunities for improvement. Using third class mail for public relations material would reduce postage costs. Peg strip accounting methods would lower the clerical effort required for report and budget consolidations.

The annual operating cost of the Systems and Procedures Department is estimated to be approximately $800,000. Therefore, implementation of this proposal should provide a net annual saving of almost $1.4-million.

2. **Conduct a statewide review of telephone costs.**

While telephones are a vital part of district operations, there are many instances where expensive optional equipment is being used unnecessarily. These items include buzzers, intercom switches, automatic card dialers, colored instruments, and so on. Consulting firms are available to study telephone installations and recommend cost reductions with no loss of service. Based on the districts visited, the annual saving should exceed $540,000 with a one-time implementation cost of $50,000.

Data Processing

The orderly and economical processing of data is vital to successful management whether the system used is manual, machine bookkeeping or computer. In Illinois school districts, almost every means of data processing is utilized including manual methods, bookkeeping machines, electronic accounting equipment, and computers. In addition to in-house facilities, many districts contract with computer service bureaus or arrange with local colleges, banks or private companies to utilize their equipment. The total annual operating cost of business data processing in the state is estimated at about $15-million.

The quality of internal data processing staffs varies from experienced professional personnel to persons drawn from the teaching ranks and trained in-house. Applications range from rudimentary payroll systems to class scheduling and grade reporting. In more sophisticated installations, basic accounting and budgeting needs are also handled. Unfortunately, districts appear to continuously reinvent the wheel, each district independently creating a system or application to solve common problems. There is no guidance or assistance from the state. Security of both equipment and critical files is generally ignored. Fire protection is also inadequate.

Considerable time and money are currently being devoted to data processing development throughout the state, but because of a lack of coordination, the net result is a duplication of effort and misapplication of resources. At present, there are several studies and/or projects by various state agencies and school districts which appear to overlap in purpose, scope, and direction.

EVALUATION

A major problem is the lack of a uniform plan to solve common problems, produce vital reports, and provide a consistent basis for educational, financial, and comprehensive forecasting data. The four primary causes are:

- Conflicts between agencies and departments regarding jurisdiction.
- Disagreements as to the importance and validity of information required by the state.
- Differences in regard to methods and timing of a uniform program.
- Lack of an effective means to enforce the discipline which is needed to implement any plan successfully.

Because of these problems, districts have been forced to proceed independently or not at all. Expertise generally is available only from equipment vendors or from consultants at prohibitive costs. Start-up costs for new installations are repeated throughout the state. Equipment is generally installed based on the vendor's job specifications rather than to meet district needs. Personnel have to be independently trained. All of this is very costly and could be avoided if proper guidance and counsel were available from the state.

Applications used in business to increase management effectiveness are not normally found in the school system. With today's technology, the school system in Illinois is on the threshold of a complete information system at a reasonable cost, and capable of supplying today's complex management needs. Data resources are available at the district level, but they must be utilized effectively. In this era of electronic processing with high-speed computers and teleprocessing, the methods and technology which are currently economically feasible should be made available to school administrators.

RECOMMENDATIONS

1. Establish a data processing network under the Department of Finance to serve all districts in the state.

Up-to-date inventory information is not available on the school system's total computer and application costs. However, annual expenditures are estimated at $15-million and an additional $4.8-million is spent each year on computer-oriented tasks in districts presently without data processing capabilities.

There are approximately 200 districts which utilize data processing applications, another 200 which have not studied or justified installation and conversion costs, and about 740 too small to consider independent computer facilities.

Two large computers with communications facilities should be strategically located, one in Springfield and one in the Chicago area. These installations would provide a network capable of supporting the data processing needs of the entire state, and serve as emergency back-up for each other.

Large and medium districts would have terminals to feed data into one of the computers. The central equipment would process and transmit output to terminal printers located in the districts of origin. Smaller districts would have a low-cost terminal for input data only. Reports would be returned to them by mail from the central site.

The cost of local terminals would be acceptable and the districts would be afforded much greater processing capability than is generally available today. Thus, the latest techniques of modern data-base information systems would be available to all districts. Implementation would make the complex job of managing schools considerably more efficient and effective.

A coordinated state feasibility study should be made of project timing, start-up, and recurring operational costs before implementing this program. The study should review projects currently underway. The best features of each should be integrated into the proposed network concept. Both educational and business applications could be in the program to serve the local districts.

Overall implementation time could require three to five years and start-up costs might range from $3-million to $6-million over this period. A pilot project is underway in a large downstate district which may be adaptable for use throughout the state. Progress of this program should be studied closely. If it is successful, it could reduce implementation costs by about 50%.

Annual operational costs of a state data processing network are estimated at $14.7-million. Not only would such a network reduce annual costs by $5.1-million, but it would provide the advantages of computer technology to all districts in the state. Start-up costs, over a three-year period, are estimated at $4.5-million.

2. Restrict further purchase, lease or rental of additional computer equipment by the local districts.

The implementation of a state data processing network will take time. During this period, some districts will want to obtain a computer and may delay joining the network. Even in a relatively small operation, implementation will require over two man years and cost a minimum of $50,000 per district. This expense can be avoided by holding these efforts in abeyance. Exceptions could be approved on a cost-justified basis by the Department of Finance.

Based on survey findings, at least 10 districts would be affected by this proposal. At a saving of $50,000 each, the one-time cost avoidance would total $500,000.

3. Require complete and standardized documentation of computer programs.

Most districts lack adequate program documentation. What does exist is fragmentary and does not follow set patterns. Therefore, standards should be published by the state so complete and standard documentation can be prepared locally. Implementation can prevent local crises from arising in the event of illnesses, terminations, promotions of key personnel or equipment malfunction.

4. Establish a users' group for all districts with computer facilities.

At present, each district must develop its own applications or modifications. While some have made rapid progress in certain areas, others find themselves in need of assistance.

Therefore, a users' group should be founded and any district with a computer would be eligible for membership. If periodic meetings were held, considerable progress could be made in establishing compatible systems, uniform procedures, standard reports, equipment backup, and information distribution. Annual travel and related costs would be approximately $200,000.

5. Submit state reports from districts with data processing equipment in computer-usable form.

In each district, many reports must be submitted to the state in state-prescribed format. Before the reports can be used, they must be put into data form by keypunching. In districts having computers, the practice is to copy a machine printout onto the prescribed form. This duplication could be eliminated if the state would accept reports in original data form. The districts could supply them as tapes or cards which could be easily transformed at state level into computer input.

Based on the size and number of the reports prepared manually by the 200 districts using computers, it is estimated that submission of data in tape or card form will represent a saving of more than $100,000 per year.

6. Issue guidelines to computer installations covering file retention, back-up procedures, off-premise storage, and recovery procedures.

There is an appalling lack of security in almost all computer facilities. In the event of a disaster, many installations might even be unable to renew operations with any continuity. To prevent this, the following should be mandatory:

- At least two copies of any critical master file should be maintained with a third tape stored at an off-premise location.
- On-line files should have three copies made daily including one for off-premise storage.
- A copy of all computer programs should be stored off the premises.
- Additional physical security precautions should be established.
- Disaster procedures should be established.

In the event a disaster should occur, improved operating and security procedures would save thousands of dollars in recovery costs. The cost per district should average no more than $1,000 and the potential saving, in the event of local difficulties, could be over $100,000. The one-time cost of implementation for the 200 computer installations would be approximately $200,000.

Accounting, Auditing, and Financial Controls

Sound and uniform accounting procedures are necessary to provide accurate and reliable records of receipts and expenditures. This is to provide informative reporting of the management of assets, and to accumulate meaningful financial data required in planning, control, and use of assets.

The state has issued basic accounting guidelines in the Illinois Financial Accounting Manual. These were last revised in 1969. However, they do not contain all internal control and procedural details needed for the differing processing approaches used by the local districts.

A consulting firm has been retained to revise this manual to conform to new regulations and accounting requirements, soon to be issued by the U. S. Office of Education, and coordinate implementation in six pilot districts. This is independent of programs being conducted in several major districts.

Each district is responsible for implementation and documentation of accounting procedures which conform to these guidelines. Local policies and practices have caused considerable variation in recordkeeping procedures, reporting formats, and management control techniques. The majority of districts have a double entry cash basis accounting system with a June 30 fiscal year closing. Some, however, have single entry or quasi-accrual accounting systems. Many districts keep financial records on a cash basis, but report on a quasi-accrual basis at year end. The Chicago school system, for example, uses a modified cash basis which is converted to a quasi-accrual basis on a December 31 year end, and also prepares state reports on the June 30 basis. A number of local districts use encumbrance accounting techniques and some have fixed asset records.

In most cases, claims for federal and state aid reimbursements are based upon direct costs and do not include allocations of indirect or overhead costs. Many varying and inconsistent accounting practices prevail in distributing certain types of expenditures between the different funds maintained by districts. A substantial number have surplus and/or deficit balance funds. Many have interfund loans which are either unauthorized or illegal.

Responsibility for the accounting function is generally vested in a district business office which might report to the district superintendent, an assistant district superintendent or the local board of education. In Cook County, however, portions of the accounting function are handled by township treasurers who report to a separate board of trustees or, in the case of Chicago, by the City Treasurer.

Normally, only routine applications such as fund accounting, payroll, activity funds, budget preparation, and simplified budgetary performance reporting are found in district accounting. A few have more advanced applications such as cash flow or portions of Planning-Programming-Budgeting-Evaluation Systems (PPBS).

Very few districts have any established internal auditing activities. OSPI has an auditing department. However, its primary scope is verification of district attendance data and claims reimbursements rather than audits of financial and accounting procedures.

Audit efforts are behind schedule and there is no record of any audits in 15 counties. Practically all districts and OSPI are regularly audited by independent certified public accounting firms.

Responsibility for financial controls is not clearly designated at the state level. The OSPI requires all districts to prepare annual budgets and reports of actual revenues and expenditures. In the absence of definite requirements, optional financial planning control systems and procedures are implemented at local levels and wide variations exist. Some districts base future budgeting levels upon anticipated receipt of all taxes levied without reserving for uncollectible or protested items.

There are varying degrees of individual school and board participation in establishment of budgetary levels. Well-administered districts usually provide monthly budget performance reports by school but with varying report formats. Very few districts provide budget performance reporting by school. Budget variance reporting is normally informal.

Many school districts maintain long-range projections of potential pupil enrollment. However, these are not normally incorporated in formal financial forecasts or reports to the school boards. Several districts are engaged in major building expansion programs with little emphasis devoted to future operational budget requirements.

EVALUATION

While the same basic chart of accounts has been installed by various districts to conform with state guidelines, considerable variation exists in basic accounting procedures, financial controls, cost accounting, and reporting techniques. State accounting and implementation assistance efforts available to the districts have been minimal, particularly in the automation of accounting applications. This has resulted in substantial duplication of efforts between districts the weak internal control procedures due to lack of systems expertise.

The prevailing use of several accounting systems has permitted wide variations of expenditures and revenues to be reported by districts between funds and between school years. This also prevents the accumulation and reporting of meaningful comparative financial data on a statewide basis which are needed by local boards and administrators to appraise and evaluate operations.

A coordinated revision of accounting guidelines, with provision for regular annual revisions, is necessary to simplify and obtain uniformity in accounting systems and reports. Differing fiscal closing dates are used which do not conform to the school year. The accounting structure is not functionally oriented and does not provide for inclusions and allocations of indirect and overhead costs. District accounting activity may be considered more of a bookkeeping function than controllership. The organizational placement of the accounting function, lack of coordinated state direction, and confusion in duties and responsibilities (particularly in Cook County) have inhibited development of sound, uniform, and properly documented accounting practices and procedures. On an overall basis, accounting and reporting procedures are inadequate to permit judicious control and management of the substantial dollar amount of public school expenditures. The need exists for adoption of a uniform accrual-basis accounting system.

Although satisfactory auditing progress has been achieved, improvements can be made in auditing scopes, standards, and reporting techniques of the numerous CPA firms used. Some local boards are not knowledgeable of audit reports or management letters of recommendation which have been prepared. A number of accounting and financial problem areas have been reported to OSPI which continue to exist due to lack of enforcement of policy or law.

Generally, adequate cost accounting and financial analysis reports and procedures have not been established. Long-range financial forecasting reports and procedures have not been adopted at the state or school district levels. Local implementation efforts alone would not be practicable since future state and federal funding assistance is generally not known beyond the present budget year or, in some instances, until after current budgets have been established. Adequate financial planning and control procedures should be coordinated with the accounting improvement program recommended herein.

RECOMMENDATIONS

1. Proceed upon a coordinated and statewide accounting improvement program to be implemented on an accelerated basis.

The Illinois Financial Accounting Manual published in 1969 does not presently meet school districts' needs. Several accounting improvement programs are presently underway, both by individual district and by OSPI in attempting to meet these needs independently. However, they are not in concert and the goals and objectives of these programs do not encompass all accounting needs.

Therefore, a financial systems improvement task force should be established, using outside consulting services, if appropriate, to obtain a clear and complete definition of the problem, as well as an acceptable and expeditious solution. When developed, rapid statewide implementation should be initiated.

The new accounting program should particularly accomplish the following:

- Provide a mandatory accrual accounting system.—Existing accounting systems are diverse, including single entry, double entry, cash, quasi-accrual, and full accrual. A uniform full-accrual accounting system is mandatory to provide accurate and meaningful data for both local and state management purposes.
- Establish a uniform fiscal year beginning September 1.—The Chicago school district starts its fiscal year on January 1. All others begin theirs on July 1. Neither is natural to the school system in Illinois. A September 1 fiscal year would coincide with the normal school year. It would also allow school districts to establish budgets after state aid funds and property tax revenues are known.
- Reduce to three the number of accounting funds now required or permitted by practice.—An unnecessarily large number of funds are maintained by various districts throughout the school system. These separate funds include educational, building, bond and interest, transportation, municipal retirement, site and construction, working cash, rent, activities, capital improvement, capital asset, textbooks, playground and recreation, lunchroom, Model Cities, elementary and secondary monies, special funds income, rehabilitation bonds, and plant operation and maintenance. These are either required by law, by state accounting procedures or by local edict. A consolidation into a General Fund, Facilities and Equipment Fund, and a Debt Service Fund would serve

all valid accounting, reporting, and control programs as well as simplify clerical procedures, records, and reports.

- Establish fixed asset detail records.—The original cost of school district capital assets is approximately $3.6-billion and is increasing annually. Most school districts do not maintain property or fixed asset detail records. Establishment of detailed fixed asset records will improve accountability and financial reporting for fixed assets, and be of invaluable assistance in insurance matters.
- Provide uniform and expanded accounting classifications and coding structures.—Uniform PPBS categories, program levels, and functional cost accounting categories must be developed to afford statewide compatibility and prevent duplication of effort by various school districts.
- Improve accounting practices for federal surplus foods programs.—Present practice is to reflect acquisitions of federal surplus foods at freight-in cost only. The existing accounting system does not reflect the dollar value of federal surplus food being used, although the amount of available federal aid is substantial. Federal surplus foods received should be evaluated at a statewide standard cost unit value. The gross amount should be reflected as an indirect federal subsidy and included as a food cost. This would permit more meaningful comparisons to be made on meal costs and surplus food usage between districts and for any district between years.
- Provide for allocation of indirect state aid or support to school district level.—Various types of state expenditures are not charged to school district level. The amount of unallocated state aid amounts to $150-million to $170-million per year. It includes state contributions to teacher retirement plans, special transportation grants, ESR expenses, and other costs. All such expenditures should be charged back to school district level to permit the true total cost of education to be developed and reported.
- Establish "discounts available" and "discounts lost" accounts.—The present chart of accounts does not provide for accountability over cash discounts available or cash discounts taken. The amount of cash discounts on a statewide basis are substantial and are estimated to range from $3-million to $5-million per year. Discounts not taken are estimated at $1.05-million annually.
- Provide a formal accounting procedural manual to be maintained on a current basis.—Accounting procedural manuals are not issued on a current basis. The last revision was made in 1969. The school districts need a formal, complete accounting procedural manual to understand proper accounting methods, eliminate varying local practices and techniques, and assist in implementing clerical procedures in a uniform manner.
- Establish uniform budget preparation and performance reporting standards to improve management review and control of revenues and expenditures.—Budgetary preparation, performance, and adherance procedures are generally weak or inadequate. The need exists for uniform procedures to permit improved budgetary controls to be established on the responsibility/cost concept.
- Provide uniform financial reports to permit local boards of education to make informed management reviews of district financial status. —Existing school district practices vary considerably as to the preparation and review of district financial reports. A few boards do not receive any appreciable extent of financial reports to permit effective review and control of revenues and expenditures.

The foregoing suggestions are to be taken in context with and implemented in the districts concurrent with the Data Processing section of this report. Substantial development and implementation costs are anticipated. However, they should be more than offset by reduction in similar costs for three major accounting revision programs presently authorized or just commenced within the state.

2. Reassign all school accounting functions to the school district.

The accounting functions in Cook County districts are fragmented and performed by township treasurers, the City of Chicago Treasurer, and/or staff members of the local districts. Confusion in duties and responsibilities results in duplication of effort and inhibits the development of adequate accounting and auditing and internal control procedures. Accounting functions performed on behalf of school districts should be assigned to those districts.

3. Define the financial management function for statewide district use.

There is no clear definition of the scope and responsibility of the local district financial management function. Therefore, a uniform functional description should be developed by OSPI indicating the scope and authority of this function. It should include responsibility for all aspects of accounting, auditing, financial planning and control, systems and procedures, as well as data processing applications for the local school district. This comprehensive guideline will assist local boards in correctly understanding the position and appraising position candidates or incumbents.

4. Amend legal requirements that school boards approve all contracts in excess of $2,500 and change school board practices whereby all accounts payable listings must have school board approval prior to disbursement.

Preparation of accounts payable listings and subsequent delayed payments to vendors often result in lost discounts. Accounts payable listings, submitted to the school board, are seldom disapproved because the liability has been incurred. Vendors' invoices, supported by receiving records and purchase orders, are considered as adequate supporting evidence of the assumed liability.

Commitment limits without board approval should be based on incremental dollar levels by size of districts. This will delegate to school management reasonable responsibility yet retain accountability, enable board members to devote more time to policy matters, and eliminate many meaningless reviews of inconsequential business transactions.

5. Revise accounts payable procedures to take all available cash discounts on purchased items.

Annual purchases in excess of $210-million are made on a statewide basis which should be subject to cash discounts of about 2% if paid on a timely basis. Tests of cash discounts taken indicate that only 1.2% are being received.

Assuming that 0.5% improvement can be made in cash discounts taken, the cost of purchased items would be decreased by approximately $1.05-million a year.

6. Develop uniform and prescribed capital asset financial justification and reporting procedures.

Uniform capital asset financial analysis and financial justification procedures do not exist. School districts employ various techniques and practices for analysis, justification, and approval of proposed capital expenditures. The annual dollar investment in capital assets is currently approximately $344-million. Within a five-year period, it is expected to reach over $585-million.

Therefore, improved techniques of financial review and control are needed. Also, financial justification procedures for major capital assets should be developed for use by all Illinois school districts.

7. Prepare long-range financial forecasts of public school expenditures.

Annual public school capital and operating revenues and expenditures are approximately $2.8-billion. Long-range financial forecasting and expenditure planning techniques generally do not exist either at the district or state level. Some districts are now following deficit spending programs and others will soon do likewise. The total is not known on a statewide basis.

Improved financial forecasting and planning procedures would afford better knowledge of total educational financial needs. Furthermore, they would permit more informed analysis and allocation of available financial resources.

Financial forecasting and planning procedures should be established by the OSPI to obtain uniformity in financial projections at the district level. In addition, specific guidelines should be issued as to future state financial assistance efforts. Local forecasts need to be consolidated and analyzed on a statewide basis to permit intelligent planning and utilization of available resources by both the state and local school district managements.

Personnel

During 1970-1971, $1.7-billion was spent by Illinois school districts on wages and salaries. Of this, $1.4-billion was classified as instructional. In 1964-1965, similar requirements amounted to $786-million and $632-million, respectively. Thus, the importance of planning, organizing, and controlling the use of people is apparent.

Educators have been analyzing the tasks involved in the teaching-learning process and reorganizing them into new jobs. This process called differentiated staffing has led to a number of new instructional roles such as school manager or administrator, master teacher, senior teacher, staff teacher, associate teacher, teaching aide, and instructional materials specialist.

Models of this concept have been implemented in a few Illinois schools.

Such an analysis of functions and structuring of jobs has been more common for noninstructional personnel. The usual tool for such purposes has been the job description. Most districts have made some attempt, but there are still a number that have not yet prepared job analyses for nonteaching positions.

During the 1960's, there was a shortage of qualified teachers, but the 1970's are characterized by a surplus of candidates. Generally, schools attempt to hire the most qualified candidates for teaching positions. Frequently, teaching experience or certification is required for noninstructional jobs. In OSPI, a large number of applicants are selected through patronage.

Every district uses some form of the step and lane system for compensating teachers. Salary increases are based upon increased service which places the employee on a higher step, or additional education which moves the teacher horizontally into a higher paying lane. At least one district uses performance-related criteria for changing lanes. The amount of increase between steps and lanes varies with the district as does the base or starting amount. Salary adjustments for certified personnel in administrative positions, excluding superintendents, are usually related to the basic teacher's or principal's salary schedule. Salary levels for noncertified administrators appear to be established with little research of comparable position rates. In Chicago, an Administration Compensation Plan was developed, but it has been only partially implemented.

Salary levels for other noncertified employees are established in a variety of ways. Most districts make some efforts to relate practices. There is little provision for merit pay practices.

Currently, there are two teacher retirement systems, one for the City of Chicago and the other for the rest of the state. All other full-time school employees are members of either the Chicago Teachers' Retirement Fund or the Illinois Teachers' Retirement Fund. Some idea of the major features of the two funds can be seen in the table to the right. All data are for 1971, unless otherwise noted.

The Chicago plan is partially funded by a direct tax levy, but the state plan relies solely upon general legislative appropriations for regular employer contributions. In addition to retirement benefits, most districts pay a portion of the cost for employee hospitalization-major medical programs. The employee pays for dependent coverages. Likewise, group term life insurance is often a part of the benefit package. In total, the districts expend approximately $27.5-million for group health, major medical, and group life, including some $11.7-million for the Chicago school system.

RETIREMENT FUNDS COMPARISON

	Chicago Teachers' Retirement Fund	Illinois Teachers' Retirement Fund
Active Participants	32,113	102,568
Annual Benefits	$ 35,829,000	$ 63,075,000
Accrued Liabilities	$717,385,000	$1,570,486,000*
Net Present Assets	$234,700,000	$ 634,316,000*
Unfunded Accrued Liability	$482,685,000	$ 936,170,000
Five-Year Cumulative Rate of Return on Investment	2.67%	3.67%
Employee Contributions	8%	8%
Per Cent of Salary Maximum Benefit	75% Average Compensation During Highest Four of Final 10 Years of Employment (Limit $1,500 Per Month)	75% Average Compensation During Highest Four of Final 10 Years of Employment
Automatic Annual Benefit Increase	2% Base Pension	2% Base Pension

*1970 Data

Illinois has not enacted legislation authorizing collective bargaining for public employees. Nevertheless, during the past decade, there has been a trend of establishing negotiating relations with formal teacher bargaining units. In the Chicago area, many units are associated with an affiliate of an international union. Outside of Chicago, most units are affiliated with a professional education association. Supervisory personnel are frequently included as members of the bargaining unit.

Where it exists, bargaining is conducted on a district-by-district basis. The majority of the contracts negotiated are for a one-year term. In addition to economic factors such as wages, benefits, holidays, and the like, contracts also cover such management concerns as teacher training, teacher duties and assignments, student disciplinary problems, changes in personnel policies and procedures, changes in curriculum, and hiring of supervisors. Frequently each requires six to eight months of intensive negotiation.

Many district superintendents report feeling inadequately prepared for collective bargaining. The employee units call upon skilled negotiators to assist them, but the superintendents seldom have relevant experience and frequently little or no outside help.

EVALUATION

With differentiated staffing, educational tasks are analyzed, defined, and reassembled into more meaningful units of work. Changes should increase the efficiency and effectiveness of the educational process since fully qualified teachers no longer need be heavily burdened with routine and clerical duties.

Although descriptions are prepared for a number of noncertificated jobs, there is little evidence that the data was accurate or effectively used.

Illinois' education system can ill-afford to select employees on any basis other than merit. To fill jobs either at the state or local level on a first come basis or patronage will lead education down the road of mediocrity. With the number of available candidates for teaching positions, districts should become more sophisticated in selection techniques. Teaching experience or certification is a qualification often required for district adminstrative posts.

The present step and lane plan for salary administration operates on the assumption that teachers improve with experience and increased formal education. Neither hypothesis appear valid. While a merit pay system would be unacceptable to most teachers, a number of new compensation ideas are being tried in some districts with apparent success. The need to bring salaries under some kind of control is illustrated in the table below by the increases from 1968-1969 to 1970-1971.

SALARY LEVELS

	1968-1969	1969-1970	1970-1971
Elementary Mean	$7,854	$8,651	$ 9,409
Per Cent Increase	—	10.1%	8.7%
High School Mean	$8,867	$9,788	$10,693
Per Cent Increase	—	10.4%	9.2%

These increases took place when the median years of experience dropped from 7.4 to 6.5 years for elementary and 6.9 to 6.7 years for secondary teachers. Compensation levels for most administrators are tied to teachers' pay scale and have little relationship to the value of the actual job. Comparison of rates for clerical and hourly workers frequently do not consider fringe benefits.

As depicted in the table directly below, instructional compensation per pupil rose 92% while noninstructional salaries per pupil jumped 96% since 1964-1965. During the same period, the cost of living rose 27.1%.

STATEWIDE SALARY TRENDS

	Instructional		Noninstructional		Consumer Price Index
	Amount Per ADA	Cumulative Increase over 1964-1965	Amount Per ADA	Cumulative Increase over 1964-1965	Cumulative Increase Over 1964-1965
1970-1971	$656	91.8%	$163	96.4%	27.1%
1969-1970	590	72.5%	150	80.7%	22.9%
1968-1969	501	46.5%	122	47.0%	17.0%
1967-1968	445	30.1%	122	47.0%	11.6%
1966-1967	413	20.8%	101	21.7%	7.4%
1965-1966	372	8.8%	90	8.4%	4.6%
1964-1965	342	—	83	—	—

There is no question but that the bargaining skills and other resources available to employee groups helped generate such increases. A more reasonable balance of power must be established so as not to bankrupt the state's education system.

RECOMMENDATIONS

1. Conduct contract negotiations on a regional basis.

Currently, collective bargaining agreements are conducted district by district. One of the results of such fragmented negotiations is that they inevitably compete with each other in terms of salary schedules. Moreover, teacher organizations, with which boards of education negotiate, attempt to outdo each other.

Such competition makes even less sense from a management point of view as a continually great portion of funds comes from the state. Consequently, negotiations should be conducted on a broader basis with respect to economic items. Local working conditions, grievance procedures, and the like should be negotiated on a district basis.

At such time as regional educational superintendents are appointed by the State Board of Education and become part of the state's educational administrative system, collective bargaining should be performed on a regional basis within such regions. Until such regions are established, however, it is strongly suggested that comparable districts within the area of the new regions form multi-district bargaining units. By conducting negotiations on a broader basis, the whipsawing between districts would be minimized.

2. Provide competent, experienced individuals to conduct negotiations with local collective bargaining units.

Despite the increase in collective bargaining activity among teachers and support personnel, many districts are not prepared to deal with this challenge. Responsibility for negotiations, in many instances, has not been fixed with any degree of clarity. Frequently, it is assumed by the school board itself. But a school board member holding office on a part-time, no-pay basis, is rarely qualified to negotiate collective bargaining agreements with professional representatives.

Enlarged bargaining units will be capable of supporting the salary of a skilled negotiator to represent management in collective bargaining. These negotiators should be aided and reinforced by a competent labor relations staff in the Department of Personnel.

The feeling of inadequacy by local district administrators in coping with the increasing militancy, expertise, and power of teacher bargaining units was frequently reported. Abilities of the school district administrators to effectively deal with maintenance and custodial bargaining representatives is, in most instances, no greater than their ability to deal with teacher representatives.

The need to establish labor relations as a separate function and develop the competence of individuals who staff this operation must have high priority if the school boards expect to meet the challenge presented by collective bargaining.

3. Negotiate employee contract agreements to be effective for not less than two years.

While the term of most employee contract agreements in the private sector is three years, many school board contracts in Illinois are of one-year duration. Such short-term agreements mean, in many instances, the parties are constantly negotiating and faced with contract termination dates. These situations increase the possibility of strikes.

It is recommended, as the Postal Reorganization Act provides, that "collective bargaining agreements . . . shall be effective for not less than two years."

4. Exclude from coverage, under collective bargaining agreements, administrative employees who have the authority to responsibly direct or make effective recommendations concerning practices of hiring, scheduling, assignment or promotion of personnel.

In the absence of legislation, collective bargaining units frequently include supervisory and/or managerial personnel. Thus, in many districts, department chairmen, deans, assistant principals, and so on, are included in the same bargaining unit with full-time faculty members they supervise. In a few instances, supervisory personnel have been allowed to form their own bargaining unit.

Undoubtedly, a contributing factor has been that supervisory and managerial employees have been members of the same professional association now bargaining on behalf of most teachers. Transformation of educational associations of broad employee groups to collective bargaining units seeking to negotiate labor agreements requires delineation of supervisory and managerial personnel.

Since collective bargaining and the administration of the agreement requires there be two parties, managerial and supervisory personnel must be excluded from bargaining units.

5. Prohibit school board members affiliated with the same local, state, national or international organization with which a school board is negotiating from participating in such negotiations and in voting on accepting the agreement.

Teacher unions and associations in a number of states have adopted the policy of encouraging their members to run for membership on boards of education. In many instances, their candidates have been successful. Because of the obvious problem presented in collective negotiations, the Commonwealth of Pennsylvania included this provision in its public sector bargaining statute.

> *No person who is a member of the same local, state, national or international organization as the employee organization with which the public employer is bargaining or who has an interest in the outcome of such bargaining which interest is in conflict with the interest of the public employer, shall participate on behalf of the public employer in the collective bargaining processes with the proviso that such person may, where entitled, vote on the ratification of an agreement.*

A similar prohibition should be enacted in Illinois to avoid a conflict of interest.

6. Explore the possibility of future implementation of differentiated staffing in Illinois schools.

Many Illinois teachers perform a number of routine or clerical tasks as a regular part of their job. Recognizing the resulting burden, educators have been analyzing the tasks involved in teaching and reorganizing them into new jobs. This process, called differentiated staffing has been tried successfully in several Illinois schools. Proponents claim it results in better teaching as well as more efficient use of education resources. The task force could not evaluate the effect on instruction but endorses the potential cost savings from improved efficiency if there is no adverse affect on learning. Therefore, educators should investigate the benefits of further implementing differentiated staffing.

It is not possible to estimate the potential saving from differentiated staffing in Illinois. By applying models from the report of The President's Commission on School Finance, entitled Economics in Education, it is estimated that potential savings to Illinois districts could be $100-million to $125-million annually after full implementation. It must be emphasized that implementing differentiated staffing is a responsibility of educators. They should ensure that the new methods remain consistent with sound educational and business practices.

7. Consider alternatives developed by some districts for deemphasizing automatic salary increases given in traditional step and lane plans.

Throughout Illinois, teachers are paid under a step and lane plan which provides semiautomatic annual increases for additional service or more education. As usually administered, they provide no salary recognition for improved job performance. One large Illinois district, noting the lack of incentive in traditional plans, has effectively modified its program to acknowledge outstanding work.

Under the modified plan, eligible teachers are considered for a movement to the next higher lane on the basis of performance related criteria in addition to formal education. Candidates for promotion are chosen by the superintendent in consultation with a special advisory committee of teachers from the district who review the candidates' qualifications and supervisory recommendations without knowing his or her identity.

This modification provides an incentive to improve teaching methods. The teacher who is willing to exercise extra effort receives recognition in his paycheck. Its successful application requires a willingness on the part of administrators to exercise judgment about performance and to abide by those decisions and an ability to identify the criteria by which judgments can be made.

8. Develop or revise, where necessary, and utilize job descriptions for nonteaching positions.

In many districts, job descriptions are not available for district administrators and other noninstructional personnel. Preparation of well-defined descriptions, based upon analysis of work to be performed, will provide a valuable tool for efficient and effective employee utilization.

Such guidelines can serve a number of purposes. They could:

- Assure significant responsibilities are assigned to a position.
- Prevent an overlap or conflict in future job assignments.
- Assist in specifying job qualifications.
- Aid in development of appropriate training programs.
- Serve as the basis of job evaluation and as guides for establishing job objectives and performance ratings.

9. Establish competitive salary ranges and merit pay plans for administrative and clerical positions.

There is a wide variety of practices for compensating noninstructional personnel. A program of job evaluation with salary ranges established for various levels of job content and performance would be more equitable and more likely to encourage improved job performance.

By relating total compensation, including base salary, working hours, vacations, retirement plans, group insurance, and the like, competitive practices would eliminate paying more or less than required to secure competent employees. Implementation should save $4.6-million annually. Of this, $1.8-million per year will be saved by the Chicago school system.

10. Implement appropriate employment procedures for hiring new personnel.

While districts seek to hire personnel on the basis of merit, some find it difficult to define the qualities they are seeking. Others take the first or most accessible candidate rather than the best qualified. Some districts defined the qualities being sought but were using assessment procedures that were not necessarily valid.

A suggested procedure for selecting employees would begin by defining the qualifications required for the job. Next, the district should ensure that a sufficient number of potential candidates are available for consideration. If there is a large number of candidates, it should select the most qualified through screening data forms designed to elicit the data required for a preliminary evaluation. Then, it should conduct multiple interviews of the top candidates. Interviewers must be properly trained and sessions sufficiently planned to ensure the data required for the decision are generated and evaluated.

While no selection procedure is foolproof, this process has a better opportunity than most for selecting qualified employees. The importance becomes apparent because under present laws, a teacher receives tenure after two years. Other employees, once hired, may be protected by union agreements or status under civil service laws.

11. Establish a state charter for district school business managers.

At present, a business manager can only be certified as an assistant superintendent, teacher or some related instructional job. If not certified, the business manager frequently cannot command the respect or salary of a certified employee. The result has been appointment of many business managers who may have been excellent educators but who are unqualified for the administrative post.

To afford the recognition due this responsibility, the state should establish requirements for a chartered school business manager. Such a charter would be based upon evidence of approved graduate training or practical experience in business administration techniques as well as an examination in required fields of knowledge.

Establishing it should ensure the candidate has mastered an appropriate body of knowledge in accounting, finance, data processing, and other appropriate fields. Second, it should ascertain whether he has developed skills in analysis and decision making. Third, it should determine if the candidate is oriented toward business management, can reduce costs, seek efficiency, and optimize the return from investment of resources. Such a charter would require an oral as well as a written evaluation. This need not be an insurmountable hurdle considering the number of districts capable of supporting a full-time business manager and the limited turnover likely to occur.

12. Adopt a merit employment system for OSPI.

Patronage considerations strongly influence the selection of the majority of employees at OSPI. Failure to select the best qualified persons available for a job will lead to a deterioration in the caliber of personnel employed. Consequently, the superintendent should investigate all alternatives for moving to a merit system and adopt the method which offers the most promise for ensuring employment of highly qualified personnel.

13. Adopt a pay-as-you-go method for funding employer contributions to the teacher retirement plans.

Currently, the employer's contribution for the Chicago plan is from the city's Public School Teachers' Pension and Retirement Fund Tax and an allocation by the General Assembly from State Distributive Funds. For the state plan, the contribution is totally based upon an allocation from the General Assembly. In 1971, employer contributions for the Chicago fund were represented by local tax levies of $14.1-million and a state allocation of $17.4-million for a total of $31.5-million. The contribution for the state fund amounted to $60.1-million. These sums can be reduced substantially by a pay-as-you-go method.

Under the proposed system, the employer would contribute annually the difference between the benefits paid out and employee contributions plus investment earnings. Savings for the Chicago fund would amount to $7-million and reduce the city's taxes by $3.1-million per year. The savings for the state fund would be $26.7-million. Combined annual savings should amount to $33.7-million.

14. Adopt investment policies currently followed by a majority of private pension and retirement funds.

Using a formula, including asset revaluation, supplied by a large metropolitan bank, the Chicago retirement fund has a cumulative rate of return for the five-year period from 1966 to 1971 of 2.67%. During the same interval, the state rate was 3.67%. A survey, analyzing more than 350 large private pension funds, reported an average return of 6.72% for that same period. Therefore, the retirement funds should adopt an investment policy similar to that followed by the major private funds.

By earning a more normal return on their investments, pay-as-you-go employer contributions required for the state fund could be reduced by $15.4-million. Additionally, Chicago's contribution could be lowered by $7.4-million, of which $3.3-million would represent a reduction in taxes. Thus, the total reduction in contributions, including those for Chicago, would amount to $22.8-million annually. The benefits to be derived are, however, contingent upon adoption of the pay-as-you-go plan which was suggested in a previous recommendation.

15. Provide a statewide single policy for health and accident, major medical, and group life programs.

In 1970-1971, approximately $27.5-million was spent on group health and accident, major medical, and life insurance. One policy issued by a single carrier, a combination of carriers or one program administered by a statewide fund, should offer economies in acquisition, administration, and other retention costs. Implementation should provide annual savings of $2.75-million.

16. Increase employee's participation in premium cost of health care insurance where districts pay more than 50% of the cost by having the district's employees absorb part or all of future increases in premiums.

Those districts which defray all hospitalization, health, and major medical fees or pay in excess of 50% of the cost should pass on all or at least part of future increases to their employees. Most employers in industry feel that employees appreciate fringe benefits more if they participate in the cost. The savings are not determinable. However, they are potentially significant.

17. Offer group life insurance to employees in significant amounts in line with their duties, responsibilities, length of service, and compensation.

Most school districts offer group life insurance plans which allow an employee to carry only $2,000 life insurance. Such coverage should be increased to allow employees to purchase larger amounts at group rates. Additional amounts should be based on duties and responsibilities of personnel as well as salary and length of service with the district. The additional premium would be paid by the employee.

18. Initiate a Communication of Benefits Program.

School employees have an excellent retirement program and most have quite expensive hospitalization benefits. Yet, the samples of materials used to explain them have been confusing and lacking in readability. Better communication would help employees realize the total value of their compensation.

Public Relations

The emphasis placed upon public relations varies widely. There is no way to measure such activities because expenditures are neither budgeted nor reported as such, by local districts. A few large districts have full-time public relations officers to furnish guidance to school boards and provide services aimed at improving communications with the community. Many of the smaller ones rely on informal contacts to tell the school's story and keep the district informed of prevailing community attitudes. Most districts assign the responsibility for public relations to some staff member who has other primary duties.

Public relations activities are usually crisis-oriented. Very few districts establish specific objectives for this function and the superintendent normally controls any public relations expenditures.

At OSPI, the Community Relations Department is responsible for carrying out a comprehensive information program designed to familiarize the public with its functions, services, and objectives. It consists of two major areas: news media and school-community relations.

News media relations personnel prepare press releases and feature stories for dissemination to Illinois newspapers, radio and television stations, educational journals, and other publications. They also arrange news conferences and interviews which involve the Superintendent of Public Instruction and maintain liaison with media representatives.

The school-community relations operation is responsible for developing public awareness of OSPI programs and services, providing citizens with an opportunity to voice their concerns about education, and explaining the implications of proposed or newly-enacted legislation. During the 1971-1972 school year, a major undertaking of this section was the *Action Goals for the Seventies* program which resulted in a publication with that title. Staff members also made appearances before civic organizations, school officials, parent-teacher associations, and other interested groups. Additionally, it operates a speaker's bureau.

The major concern of this department is the low visibility of OSPI throughout the state. Its objective, with its staff of eight and current budget of $68,900, is to amplify the tone, quality, aspirations, and achievements of OSPI.

EVALUATION

With few exceptions, public relations is a stepchild in school district operations. There is no doubt that the absence of a positive public relations program is hurting the school system through a lack of effective two-way communication with the public.

Citizens have lost faith in the ability of the school system to deal adequately with issues ranging from busing and integration to special education for physically or culturally disadvantaged children. Taxpayers show their frustrations, priorities, and discontent by rejecting referendums for increasing tax rates and building new facilities. School districts receive no significant help from OSPI in carrying out local programs. The lack of professional help from state or regional offices throws an unnecessary burden on the local district.

RECOMMENDATIONS

1. Establish and implement a management plan of action for effective public relations activities in the districts.

District public relations tend to be a reaction to local situations rather than the result of a well-conceived program. As a result, resources are used inefficiently and on an emergency basis. To achieve an effective public relations program, an appropriate person in each district should:

- Identify public relations problems and opportunities in the local community.
- Develop specific objectives and plans supported by an adequate budget to improve community relations.
- Implement approved proposals.
- Follow up to ensure that objectives are achieved.

The initial requirement is an objective assessment of conditions in the local community. In most districts, data will be supplied through individual contacts and community involvements. Only in larger districts would it be necessary to use sampling and research techniques. In either case, an annual evaluation should be made in writing to place conditions in perspective.

Once the local situation has been analyzed, a public relations program should be developed to include specific objectives, an appropriate plan of action, and a sufficient budget. The final step will be implementation and follow up to ensure coordination and effective utilization of resources. If this approach is used, community support of educational activities should be improved and expenditures placed under better control. Factors to be incorporated in district public relations efforts include:

- Build effective working relations with local communications media.
- Provide a means for local citizens or groups to communicate views about education to district administrators.
- Cooperate with PTA's, booster clubs, and citizens' groups in analyzing local educational problems and implementing solutions.
- Utilize students to prepare by-lined articles about their school for use as press releases.
- Organize a speaker's bureau to address local groups.
- Encourage the use of school facilities by community groups with fees that are sufficient to recover out-of-pocket expenses and publicize their availability.
- Maintain a file of news releases, clippings, publications, and so on as a continuing record of district activities.
- Form a district public relations council with representation from each school to coordinate activities in the area.

2. Assign responsibility and accountability for district public relations to a specific individual.

The public has a keen interest in the school system. As parents, they are emotionally involved in the education of their children. As taxpayers using the referendum, they control the level of local expenditures. In addition, the public is frequently critical of educational quality and costs without being adequately informed of the facts. Consequently, school districts are quite vulnerable to a lack of public support.

In recognition of the importance of good public relations, responsibility for this function should be assigned to an appropriate individual. If the district cannot afford a full-time public relations officer, the function should be clearly assigned to a district staff member who would be accountable for public relations in addition to his other responsibilities. In this way, attention will be given to establishing an effective public relations program before a serious crisis developed.

3. Provide local districts with public relations counsel from OSPI.

Bond and tax referenda, major curricular changes, racial integration, and many other major school problems require strong public support. Yet the local districts frequently cannot afford the expertise to develop such backing.

OSPI should either furnish needed counsel directly, or prepare a list of appropriate sources for public relations advice. Districts should be encouraged to provide feedback on the assistance provided. Implementation would assist local districts in developing more effective support for education in their respective communities.

4. Have OSPI analyze the effect of pending legislation and communicate recommendations to the district for possible dissemination to local communities.

Most district administrators were uninformed of pending legislation and its possible effect upon education. Lack of such information locally is unfortunate since the community tends to look to the local superintendent for leadership. In educational matters, OSPI should keep districts advised so superintendents can inform and, where necessary, encourage appropriate expression of the public interest.

Purchasing and Warehousing

Procurement of materials, supplies, facilities, and services, excluding salaries, involved an expenditure of $625-million in fiscal 1971. Included in this amount were expenses for board-approved contractural services, site acquisitions, buildings, utilities, and heating. These purchases are outside the scope of this section of the report. The expenditures studied include materials and supplies and additional and replacement equipment as well as miscellaneous expenditures. Outlay for these categories totaled $251.4-million for fiscal 1971.

The purchasing function is either the responsibility of the business manager or equivalent in the districts employing one, or the superintendent. Excluding Chicago and the largest districts, few employ personnel who qualify as professional purchasing agents.

Policies and practices are based on specific provisions of the Illinois School Code as well as general accounting procedures set forth in the Illinois Financial Accounting Manual. Each district is responsible for the conduct of its business functions, including purchasing. The local board sets the policy to which the administrator must adhere. Since each board sees its responsibility differently, substantial differences in administration exist. The necessity for administrators to meet established requirements is a key functional consideration. To a large extent, current methods enhance purchasing effectiveness. However, some practices lead to unnecessary expense.

Apart from dollar limitations, the majority of the districts use the following general procedure for volume purchases:

- Near the end of the school year, a survey of anticipated requirements is made.
- Forms are developed, the intent to bid advertised, and forms released to interested bidders.
- After being publicly opened, bids are analyzed and low bidders determined.
- Results are presented to the board for review and approval.
- After approval, purchase orders are issued for single deliveries before the start of the next school year.
- Smaller items and some bulk materials are distributed to the schools or classrooms upon receipt. The remaining supplies are warehoused.

Most schools bid at approximately the same time and require a single delivery of annual requirements. This makes the school supply industry highly seasonal. Purchases of miscellaneous items are made on an as-needed basis. Larger districts tend to employ central warehousing. Most districts with such facilities have not quantified their value.

In terms of paper flow and procedures, there exists as many variations as one would expect in more than 1,140 independently conceived systems. Most districts use multiple-copy requisitions and purchase orders to tie their systems together.

School districts are permitted to buy common needs jointly. They are also permitted to buy under some contracts negotiated by the Department of General Services. But only one-third of the districts are currently using these methods to some extent. The purchasing section of the OSPI assumes no direct responsibility for purchasing functions in the school districts.

EVALUATION

State guidelines for school procurement place a high premium on objective price determination and vendor selection. Local boards usually establish even more stringent limitations on administrative latitude. The result is that school officials appear to overlook purchasing methods which are widely used elsewhere, but lie outside established procedures. Some school officials have recognized the need for more sophisticated purchasing practices. However, the combination of decentralization and local autonomy presents formidable obstacles to implementation.

Numerous instances exist where concerted action would lead to worthwhile savings. There is also room for improvement in the area of procedures and paperwork. Most schools apply a single procedural system across a broad spectrum of purchases. This results in overcontrol of the trivial and undercontrol of the significant.

In view of the impact proper inventory decisions can have on costs, it is surprising that so few districts utilize professional inventory management techniques. An even greater problem is that necessary expertise in general purchasing is not available even at the county or state level.

The purchasing function must be concentrated into fewer units to achieve greater purchasing power and permit specialized buying. Alternative techniques include statewide centralization, increased emphasis on cooperative buying, as well as extended use of state contracting.

In summary, the present decentralized system presents special obstacles for public purchasing. It offers no mechanism for widespread implementation of improved practices. In addition, it dilutes purchasing power and prevents effective use of specialists. Substantial savings will be realized only when steps are taken to minimize the negative effects of decentralization. Thus, there seems to be a need for a central organization to develop objectives now beyond the reach of individual districts.

RECOMMENDATIONS

1. Initiate a four-part program to improve the collective buying power of Illinois schools.

The decentralized operation of the school districts dissipates the advantages which should accrue to a large-scale purchasing effort. However, a relatively inexpensive means to reap such benefits is available. It would require implementation of the following four-part program.

- Establish a staff purchasing function at the state level.
- Expand cooperative buying and warehousing efforts.
- Use systems contracting and other specialized purchasing techniques.
- Increase the utilization of state-negotiated purchasing contracts.

Details on each of the phases are given in the following four recommendations. Implementation will provide an annual saving of almost $12.6-million by establishing a comprehensive purchasing program for all Illinois schools.

2. Create a state-level staff purchasing function.

Despite the fact that district purchasing is done in compliance with state and local guidelines, the average prices paid are too high. Virtually all contract prices are set as the result of competitive bidding.

However, although the districts may be buying to best local advantage, the overall performance of this decentralized system is unacceptable. There is little the individual district can do to improve the situation. Therefore, a state-level purchasing function must be created to:

- Coordinate district purchasing practices, such as cooperative buying, in areas where single units cannot operate effectively.
- Provide staff support in the organization of purchasing information, adoption of specifications, implementation of improved systems and procedures, and provision of adequate warehouse facilities.
- Promote improved quality in the overall purchasing system, specifically in the area of purchasing specialization.

The purpose of the proposed staff would be to pull together statewide purchasing and warehousing efforts. Being in communication with all districts, it would satisfy the need for dissemination of purchasing information. By following bidding results, it could provide the districts with valuable data regarding potential suppliers, current price levels, and the like.

The section would also aid in the promotion of cooperative purchasing and warehousing activities and would have important responsibilities in the area of state contract development. Finally, this staff would be able to sponsor statewide programs to improve the quality of the systems used as well as the expertise of local personnel. The overall effect would be an achievement of most of the benefits of centralization without upsetting the current structure. The annual cost of implementation would be $550,000.

3. Expand the use of cooperative buying and warehousing activities among the local districts.

An analysis of several commonly used supply items showed price variations of up to 300% among the districts. Cooperative buying and warehousing offers great cost reduction possibilities if certain problems can be overcome. Local boards are not as aware of the potential benefits as they should be. Without board endorsement and support, school administrators cannot contribute effectively to such cooperative efforts. Therefore, a positive program would require:

- Local board to establish and publish guidelines and policies regarding cooperative purchasing and warehousing.
- Local board representation on the major policy-making body of each cooperative buying group.
- Preparation and promulgation of a commodity classification code.
- Adoption of existing federal specifications for commonly used pieces of equipment and other supplies.
- Utilization of a financial incentive plan, based on dollar volumes, for cooperative purchases.

Bidding that allows boards to exercise local options after review will not be taken seriously by vendors. Therefore, awards must be made in strict accordance with bid documents. The heart of a successful cooperative system is the use of a commodity classification code to provide a common language.

Excellent ones already exist and would probably meet the needs of Illinois schools. In the same vein, current federal specifications could be used to resolve questions of quality, construction, description, testing, and the like. Use of a financial incentive plan would provide benefits to make cooperative purchasing and warehousing as attractive to large districts as it should be to smaller ones. In addition, it would help compensate the districts for time spent by school officials on this activity. The state could set procedural guidelines to establish minimum standards regarding qualification for benefits.

4. Use staff support to promote the use of systems contracting, blanket order, stockless purchasing, and the like for low dollar volume items.

A single purchasing system requires personnel to spend a disproportionate amount of time handling individual orders. Systems contracting, blanket orders, and stockless purchasing should be used to reduce the amount of time spent on small orders while maintaining reasonable cost levels.

Items which can be purchased from a single source are grouped together and a local vendor chosen to supply them for six months or a year. As a need develops, the merchandise is ordered at predetermined prices. Procedures which eliminate normal paperwork may be incorporated into the overall system.

As with most specialized procedures, these systems require experienced personnel to implement them. A great deal of literature is available and training programs for school personnel might be a possibility. The proposed functional purchasing staff could develop the necessary programs for use in the districts.

5. Expand the use of state-negotiated purchasing contracts.

Individual districts buy most equipment items so infrequently that they have only limited knowledge in regard to sources, prices, and the like. Also, district volume is small. Collectively, however, the schools represent a huge market that would benefit from centralized negotiation. To the extent that a supplier's cost of doing business with schools can be reduced through central purchasing activities, the expense to the schools can be lowered.

A professional purchasing group, such as already exists in state government, is in an excellent position to negotiate on behalf of the districts for widely used equipment such as furniture, office machinery, and so on. The proposed state level staff function could oversee the necessary coordination.

6. Eliminate the requirement for advertising formal bids.

All school districts, except Chicago, are required to advertise formal bids in a local newspaper. Responses are low and the average cost per response is several hundred dollars. In addition, the notice requirement consumes valuable time during the bidding period. The annual saving to be achieved by dropping this advertising would be $96,000 at current expense levels.

7. Centralize purchasing for bus transportation services and driver education.

The Illinois school bus fleet exceeds 8,800 vehicles. Using a seven-year average life span, new bus purchases cost approximately $10-million annually. In spite of this huge volume, districts receive little purchasing guidance or assistance. Some schools complain that it is difficult to get opinions on the legality of specifications.

The combined size of the transportation operations warrants the full-time attention of purchasing specialists. School bus specifications should be standardized for purposes of economy and control of safety features. Also, uniform requirements would provide a sound foundation for volume purchasing or even special production runs. Volume purchases and elimination of options could save at least $25,000 per year on new buses.

Gasoline is such a major item that it would benefit from a buying program in the hands of an expert. The Illinois schools should deal directly with major oil companies and qualified independents. Comprehensive studies should be made on tank and pump ownership. Gasoline used for driver education programs should be combined with bus usage.

At the present utilization level of more than 11.2-million gallons annually, a saving of at least $224,400 per year is a reasonable goal. Lubricants, tires, batteries, and repair parts are also areas for potential savings, largely unexplored. In summary, the economic benefit of centralized buying should be in excess of $850,000 per year.

8. Install inventory management systems in all central warehouses.

Most districts use their central warehouses merely to store goods purchased at the beginning of the school year. The flow of materials should be analyzed throughout the year. In this way, purchases and inventories would be based upon the combined cost of acquisition and storage rather than acquisition alone.

Data on economic order quantity techniques should be made available to the schools. Good inventory management practices would eliminate the questionable practice of buying annual requirements of supplies at one time.

9. Obtain competitive bids on intradistrict delivery service.

Many districts, especially those with central warehousing, make routine deliveries to schools. Experience by industry has shown that their delivery vehicles must be operated at least six hours daily to recover costs. Most school equipment is used only a fraction of this time.

Therefore, schools located in metropolitan areas may find contract deliveries less expensive than a district operation. After ascertaining the internal costs, the local school districts should compare them to competitively obtained bids for outside service and be guided accordingly.

10. Adopt a combined purchase order form.

Illinois schools now issue more than one million purchase orders annually. Most use separate forms for the requisition, purchase order, receiving report, payment voucher, and information copy. A purchase order which combined these requirements would:

- Eliminate retyping.
- Reduce paperwork by three pieces per order.
- Facilitate receiving and recording freight bills.
- Expedite the issuance of purchase orders.

The average cost of separate requisition and purchase order forms is $0.12. A combination form, used on a statewide basis, would run approximately $0.03 per set, providing an annual saving of $90,000 at current usage levels.

School Food Service Programs

In fiscal 1971, 3,607 Illinois schools participated in the National School Lunch Program. There were 140,533,184 lunches and 6,229,626 breakfasts served. Of these, free or reduced price meals totaled 49,599,264 and 5,720,352, respectively. During the same period, the Illinois school system operated a total of 2,702 kitchens.

Most school districts provide kitchens and lunchrooms to prepare and serve noon meals for students. A few use the facilities for home economics instruction, but basically they exist to provide lunches and, in some cases, a limited breakfast program.

One individual in each district is usually responsible for the lunch program including personnel, food, supplies, and sometimes equipment. This person also prepares menus and handles maintenance of lunchrooms, kitchens, and equipment. In larger districts, an additional employee acts as head of each kitchen. In the smaller ones, a single person performs all functions other than the actual serving in addition to acting as cook. Larger urban districts employ cooks, truck drivers, dishwashers, and other workers. Each district runs its own program. Planning assistance is available from the Office of the Superintendent of Public Instruction, but seldom used.

Statistical reporting is handled by the school lunch program administrator with detail information provided by the functional head of each cafeteria. Preparation of input figures for state reporting is done differently in each district. Inventory counting also varies with respect to time intervals and methods of accountability. Additional observations on the program include:

- Some high schools have open lunch periods which allow students to leave the building. This practice makes meal planning difficult and generates waste.
- Many pupils who do not eat in the lunchrooms are in elementary schools which are close to their homes.
- In the larger districts, the use of preprocessed foods is increasing.
- Approximately one-third of the districts use central kitchens for the preparation of food for a number of schools.
- When both parents work, there is pressure to provide lunches in elementary schools.
- Within a district, individual lunchrooms are sometimes autonomous and receive little direction from the administration.
- Most school lunchrooms purchase milk and bread on annual contracts.
- Purchasing procedures, including available storage, vary widely.
- Vending machines have been installed in some lunchrooms, but their use is not increasing.

- The capital expenditure to equip a local kitchen ranges from $20,000 to $25,000. The expenditure for a central facility varies from $50,000 to as much as $100,000.
- Attendance at workshops is low because most districts do not cover travel expenses for cafeteria managers.
- Approximately one-third of the districts use student help in cafeterias.

Lunchroom charges range from $0.20 to $0.50 for elementary students, $0.35 to $0.50 for high school pupils, and $0.35 to $0.75 for adults. Expenditures for the total school lunch program in fiscal 1971 amounted to $93.5-million. Since revenues were only $92.5-million, the program suffered a net loss of about $1-million statewide.

EVALUATION

Lunch program directors are usually dedicated individuals with a background of practical experience and/or formal education in nutrition. They seldom possess sufficient business management backgrounds. Job descriptions for lunchroom managers and personnel have not been established and qualifications vary among the districts. Many kitchens are overequipped since facility planning is often handled with the aid of cafeteria equipment manufacturers or suppliers.

Several districts operate central kitchens which prepare both hot and cold lunches in bulk for individual schools. The equipment needed at the school is relatively inexpensive. This approach provides substantial savings after an initial capital outlay. Districts with central kitchens claim savings of 10% to 30% due to lower personnel levels, reduced equipment expense for new schools, and improved purchasing power.

Most districts use the Federal Surplus Food Commodities Program. Some criticism has been noted in the area of commodities received versus those ordered. The Springfield distribution center often adds to the original requisition. The extra items create overstocking and storage problems for many districts.

Cooperative purchasing by the districts is seldom attempted. The primary reasons are the short order cycle and a lack of communication between districts. Warehousing is a serious problem. Space is not provided on a well-planned basis. This lowers the turnover of food products and makes inventory control difficult.

Accounting procedures, other than those for state and federal reimbursements, are not standardized. Expense reporting does not include overhead items and may not reflect all payroll expenditures. A monthly profit and loss statement for each school is rarely prepared. In addition, the lack of a production cost control system precludes effective cost and operating control by food service management.

RECOMMENDATIONS

1. Establish effective management and cost control reporting.

Current accounting procedures are incomplete and do not reflect all costs associated with the school lunch program. Head count records provide data for filing state and federal claims, but are insufficient for accurate cost and budget control. Most districts prepare a profit and loss statement. However, this report is normally on a district-wide basis and does not highlight potential problems within an individual school.

A true profit and loss statement would include all expense and income items on a monthly basis for each operation. This would provide a timely report for effective control of the food service operation. Prepared monthly, it would give food service and district administrators a tool for control, evaluation, and corrective action. Implementation will provide an annual saving of between 1% and 4% of the total expenditure through improved cost control. A saving of 1% would amount to $935,000 per year.

2. Centralize kitchen operations wherever possible.

At present, about 20% of the districts have centralized kitchens. However, new programs will strain current methods and facilities. Increased utilization of centralized facilities will help minimize this situation and provide a more efficient operation.

Existing kitchens could be used for breakfast preparation with luncheons shifted to centralized facilities serving one or more districts. Implementation will achieve the following: increased productivity, more efficient equipment utilization, greater purchasing power, tighter food control, better quality control, and improved inventory control.

A one-time cost of $500,000 is anticipated for equipment relocation. The annual saving to be realized from reduced meal preparation costs is estimated at almost $7.6-million.

3. Establish job descriptions for all food service personnel.

Few districts have formal job descriptions for cafeteria managers or other food service personnel. Without them, qualifications for such personnel are hard to establish. In addition, performance evaluations are difficult to administer objectively.

Therefore, job description files should be developed for all food service functions to outline duties, responsibilities, and reporting relationships. The cafeteria manager should be a competent administrator and experienced in the following areas:

- Personnel relations.
- Food and labor cost control.
- Inventory control procedures.
- Equipment utilization.
- Communication with administration.
- Food production schedules.
- Kitchen layout.
- New methods development.
- Training program administration.

Implementation would upgrade the quality of cafeteria management and food service personnel. This would have a direct effect on the total operating expense of the program. However, no dollar figure can be established at this time.

4. Increase the use of student help in food service programs.

Only 30% of the districts use student help. Where it is used, little is done to integrate food service experience with cooperative work programs.

Cooperative work programs should be expanded at the junior high and high school levels. This would supply enough students to constitute 10% of the total work force. The benefits to be realized include addition of a new work program for students and a net reduction of about 5% or almost $1.4-million in annual salary expenditures.

5. Expedite implementation of government surplus commodity processing agreements.

Less than 2% of the districts use the current commodity processing agreement issued by OSPI. This agreement allows districts to contract with private industry for processing and delivery of prepared foods or food components. Surplus food commodities from the U.S. Department of Agriculture are used by the processor.

Interest has been expressed by industry, but it is tempered by the relatively small needs of many school districts. On a statewide, regional or a large district basis, the volume would be sufficient to produce economic benefits for both parties.

An aggressive effort should be made to align an adequate number of districts into a cooperative commodity processing agreement. OSPI estimates a 5% reduction in current food costs which would provide an annual saving of $2.6-million.

6. Centralize food purchasing procedures.

In most districts, food purchasing is done by individual cafeteria managers. This limits the quantities bid on and ordered. An effort should be made to consolidate district orders into one request. Preparation and computation of bids would then provide the best price possible on all food products.

Some expense would be incurred for order consolidation and bid analysis work. However, the savings would more than offset the cost. A potential annual saving of $4.2-million is included in the savings claimed in the Purchasing and Warehousing section.

7. Design a standard procedure for cash handling at the state level.

Last year, approximately $56-million was handled by lunchroom personnel in the state. Each district has its own procedures and many lack proper controls. Receipts are usually deposited by the lunchroom manager or sent to the district office.

A procedure should be designed for all cafeteria operations which provides maximum control and allows sufficient flexibility to accommodate various cash receiving methods. A sound cash handling system will establish the controls necessary for adequate supervision.

8. Implement extensive use of products such as synthetic meat substitutes.

With food costs rising rapidly, food services directors should take advantage of every opportunity to utilize more economical ingredients. An example is the use of synthetic meat substitutes. These products recently approved by the U.S.D.A. for use in school lunches can cut costs and provide additional nutrients. Two districts buying these substitutes report a reduction of some 9% in meat costs. Assuming this figure is representative, proper use of meat substitutes could save over $2.7-million annually. Other such products may be available and should be examined.

9. Increase district use of government surplus commodities.

Although most districts utilize the surplus commodities program, few use it to full advantage. Many districts purchase large quantities of staples and later find they could have been provided in the surplus commodities program. Others do not properly forecast their needs.

Generally, the federal and state departments responsible for administration of the programs do not provide sufficient information in time for districts to plan local requirements. Often, more surplus products are delivered than were requisitioned and items not ordered may be included. As a result of this communications problem, many districts plan their food operations with little regard for the program.

Improved communication between the U.S. Department of Agriculture and the Office of the Superintendent of Public Instruction is needed. A list of available commodities, with the forecasted allotments, should be sent to the districts prior to the start of the school year. Districts should also be notified of available commodities at least two months in advance. The benefits to be realized from implementation include:

- Better menu planning.
- Improved utilization of warehousing and other facilities.
- Increased opportunities for the local districts to plan their food program around the surplus commodities.
- Coordination of district needs with government deliveries.
- Improved inventory control.

Textbooks

Textbooks are used in the regular school program, adult education courses, and summer school. During fiscal 1971, approximately $22.5-million was spent on textbooks and related services in Illinois excluding Chicago. Of this figure, almost $4-million went for free textbooks. Rental and book sale revenues were approximately $17-million for the period. There has been an annual deficit in the textbook accounts for the past five years. In fiscal 1971, it amounted to $5.5-million, up from $5.1-million in 1970. OSPI is not directly involved in the selection, procurement, price negotiation or disposal of textbooks. These functions are performed individually by each school district.

All districts involve teachers to some extent in choosing books for each course and grade. Their recommendations are based almost exclusively upon content and adaptability to the local curriculum. Little consideration is given to price or durability. The time spent by teachers and administrators in evaluating proposed texts is enormous, averaging 1,000 man-hours per district. Costs associated with the procedure could not be isolated other than to indicate they are substantial. Some districts must hire substitutes while regular teachers serve on an adoption committee. Others pay teachers additional amounts to sit on a committee during the summer.

Nearly 20% of the elementary districts provide free textbooks to students. The remaining 80% rent books to students for an annual fee. The average rental is $9.45. In high school districts, approximately 14% provide free textbooks, another 14% sell books to students, and 72% charge an annual rental fee. The average rental in high school districts is $11.40. Rental fees are usually based on the estimated cost prorated over the expected life of the book, normally three to five years.

Approximately 25% of the districts do not rebind damaged books. Of those which procure rebinding, some 42% pay from $0.50 to $1.50 per book. About 58% pay from $1.51 to $2.60 per book. In past years, the Illinois penal system has been a major source for this service.

With few exceptions, inventory control procedures are not used and no accounting data are provided for routine evaluation. Disposal of discontinued books is a problem for all districts. Practices vary from donating texts to charitable institutions, selling them to book dealers or destroying them. Books sold to dealers normally yield $0.10 to $0.15 a copy. The Chicago school system gets a 5% "book exchange discount" from publishers for keeping used books off the market.

The Illinois School Code requires all publishers to file their lowest net wholesale price by July 15 with OSPI. A copy of this list must be sent to all districts within 30 days of the filing. The code further states that no book on this list can be sold in Illinois at a higher net price than is received for it elsewhere in the United States. There is ample evidence that the Office of the Superintendent of Public Instruction is not monitoring these requirements.

EVALUATION

The variety of books used by the school districts contributes substantially to the confusion experienced by teachers and pupils when they are transferred to a new school. Many districts have multiple adoptions for the same course and grade. The time spent by teachers and administrators in evaluating textbooks is excessive. Evaluation studies completed by other selection committees are not used by the districts to minimize costs. Except for Chicago, which contracts with publishers for a four-year adoption cycle, there is little price protection for the life of an adoption.

Many states including Illinois have laws stipulating that books sold at a lower amount in another state entitle them to the same price. This tends to force publishers into a uniform national pricing policy, regardless of the quantities purchased. Publishers deal with the Illinois school districts on the following basis:

- Individual school districts are responsible for textbook selections and quantities purchased.
- The adoption process is concerned almost exclusively with content disregarding factors of cost and durability.
- The process also increases the publisher's cost of solicitation, promotion, and sampling.

Publishers currently furnish any number of free samples to a district. This practice alone costs them approximately 3% to 4% of book sales. Although discontinued textbooks are a statewide problem, there has been no effort to publicize a discontinued list. Thus, there is little opportunity to resell books to other districts.

There is no uniformity regarding the rental or sale of books nor are specific accounting procedures followed. Few districts attempt to allocate overhead expenses to the textbook procurement and distribution process. Receipts are often handled loosely and book usage statistics were impossible to compute.

RECOMMENDATIONS

1. Publish lists of discontinued textbooks that are in good condition.

Individual districts are not offered an opportunity to reduce expenditures by buying and selling textbooks between districts. Therefore, OSPI should request each district to supply a list of available books for sale at the close of the school year.

This practice should be limited to books that are no more than two years old and in good condition. Information on quantities should be provided. The list would be circulated to all districts outside the Chicago system. It would become a source for supplemental needs during the life of an adoption. A price of $1 for new texts and $0.50 for used books should be established. Implementation would achieve an estimated annual saving of $390,000 through use in other districts of approximately 6% of the texts abandoned annually.

2. Increase the use of paperback textbooks.

With more districts providing free books and shortening the adoption cycle, the overall cost of textbooks is becoming quite significant. Some publishers state that the price for paperbacks is close to being the same as hardback books. While this may be true in some cases, it is due to the fact that hardbacks are produced on substantially longer press runs. This situation could be reversed with increased use of paperbacks. Therefore, more utilization of paperbacks should help hold down the cost of education. A 10% increase in paperback usage would generate an annual saving of $57,000.

3. Establish a uniform inventory control system through OSPI for the distribution and accountability of textbooks.

Most districts do not use a formal inventory control system in distributing textbooks. Therefore, few know the number, age, replacement, and amortized cost of the books currently in the district. If there is an inventory system, it is most often at the classroom level. As a result, additional texts may be ordered during the year even though a surplus of the same book is available within the district.

Therefore, a standard system, based on sound accounting principles, should be established throughout the state. Implementation will help achieve maximum utilization of books within each district. It will also provide proper documentation for insured textbook losses.

4. Discontinue the current practice of rebinding textbooks.

Rebinding is a high labor content operation. As the price of labor continues to rise, the cost of rebinding will increase at a corresponding rate. Although more than half of the school districts have textbooks rebound, many have not accurately examined the economics of this practice.

Approximately one-third of the districts do not rebind books. Of those that do, 58% pay in excess of $1.50 per text exclusive of overhead costs. Eliminating this practice would result in an annual saving of $190,000.

5. Establish a separate account number for teacher and administrative salaries paid for time spent on the textbook adoption process.

The time involved in textbook adoptions is enormous. Even small districts report spending close to

1,000 hours annually on this procedure. Many districts incur additional expenses for the adoption process. For example, one spent 13% of its total textbook expenditure in additional salaries for the adoption process. The Chicago system spends over $100,000 annually in summertime salaries and catalog costs.

A separate account for these expenses would isolate the amount being spent on the adoption process in each district. Once this information is available, steps can be taken to reduce the cost involved. It is estimated that approximately $11-million is spent annually on the adoption process. A 10% reduction would provide an annual saving of $570,000 since approximately 50% of the districts do not compensate personnel for involvement in the process.

6. Establish use and verification of charges on bills of lading and postage rates for educational materials.

There is no use or verification of charges on bills of lading and postage rates for educational materials. Bills of lading and postage rates on all invoices for educational materials should be checked before any are paid. This will avoid overcharges for transportation. It will also allow data collection so transportation charges can be budgeted as a textbook cost.

Library Books

School libraries provide a wide range of services and facilities to meet changing instructional needs. Many offer a substantial selection of audio-visual aids. Further, new types of learning materials have been made available to school systems such as tape cassette recordings. This increased variety of instructional devices has been one of the principal reasons for increases in expenditures for library media.

Most secondary schools in Illinois have a central library facility. Only about 50% of the elementary schools have central libraries within the building. Those elementary schools which do not have such facilities have room libraries, sometimes supplemented by a mobile unit from the district office.

Library media are financed from local tax and general state aid funds and federal funds administered by the state. Since 1967, federal funding has decreased 51% to approximately $1.2-million or $0.53 per student. State funds have increased 41% to the fiscal 1971 level of $12.4-million, or an average of $5.51 per student. The emphasis placed on instructional aids varies substantially between districts. Reported per-pupil costs varied from $0.51 to $22 in the districts surveyed. The state average is about $6 per pupil for text and audio-visual material.

About 60% of the districts visited had some centralized control over their libraries. The remainder let the individual units establish media selection policies. For the most part, books are chosen by librarians in consultation with individual teachers or book selection committees.

Purchasing is usually handled through a district business manager, purchasing agent or authorized purchasing personnel. Most districts consolidate purchase requests into a single order. Orders are usually placed through jobbers without formal bid specifications.

Before library books are placed in circulation, they must be cataloged, have file cards prepared, and book envelope packets attached. Kits are available for this processing at an average cost of $0.30 to $0.40 each. In many cases, "shelf-ready" books may be purchased at an average cost of $0.60 per book. About one-third of the schools surveyed avail themselves of the kits while the remainder make up packets themselves. Schools which do their own processing typically have higher per-book costs. One district spends almost $2.30 per book preparing it for placement.

Approximately two-thirds of the schools surveyed have a consolidated card catalog of books available in the district. However, few schools utilize book exchanges within a district. Most school libraries claim to have a good informal working relationship with the public library system in their area. Still, no significant attempt has been made to consolidate purchases with them.

EVALUATION

Public schools in Illinois differ widely in their ability to provide libraries that implement, enrich, and support their educational programs. The principal reason is the lack of funds in some systems.

In general, library facility and material needs have lacked the planning necessary to integrate this service with the total educational environment. In addition, there is very little interdistrict centralization of library material and references. One exception is the cooperative film libraries which have been instituted in some districts. Further centralization of the cataloging and distribution function between districts could provide a more economical library operation.

Purchasing is handled by each school district. This restricts the opportunity for discounts and results in a lack of uniformity. Similarly, time spent by librarians with salesmen and book selection committees is duplicated in all school districts and often within districts with more than one library.

Labor costs vary according to the use of professionally-trained personnel. Many teaching and library groups advocate professional libraries in all school buildings, but few districts can afford this service. Pilferage is a growing problem in secondary schools. Often, school libraries are designed poorly and, as a result, librarians find it difficult to control book losses.

Some schools participating in the Title II program find themselves with budget problems. The amount of funds the district will receive is unknown until after the program commitment has been made. Often, districts will receive less than the money asked for. Not all of them can afford to make up the difference from their funds.

RECOMMENDATIONS

1. Centralize control of Educational Media Centers (EMC) under single supervision within each district.

Many districts fragment their control of the Educational Media Centers. As a result, there is only casual coordination concerning materials selection, purchasing, long-range planning, quality of the entire collection, and development of each collection to support the others.

Centralized control of Educational Media Centers should encourage uniform goals for media centers in their support of the teaching mission. Further, centralization would encourage fuller utilization of all materials by providing one responsibility for centralized coordination of media selection within groups and grade purchasing as well as distribution and movement of materials within the school district.

In many districts, teachers in each school select the materials and books for their classes unilaterally with the building librarian. Therefore, districts have multiple material series covering the same topics.

2. Consolidate book and audio-visual budgets within each district and work toward cooperative purchasing to negotiate additional discounts.

Few districts take advantage of cooperative purchasing for library materials to achieve additional discounts from jobbers, publishers, and suppliers. Since discounts are available on the basis of total dollar volume, it is estimated that a saving of approximately 5% could be achieved through a consolidation of purchase orders within and between districts. The annual saving will be $505,000.

3. Analyze the work performed in libraries and structure assignments to remove routine responsibilities from the professional's duties.

Processing, cataloging, repairs, and distribution of materials is often part of the professional librarian's job. Most of this work could be done as well by paraprofessionals, clerical staff, and student aides.

If library tasks are assigned at the proper experience level, professionals would have more time to spend in their area of expertise. This would provide more productive use of total manpower and better overall library service.

4. Use purchased book processing rather than self-processing in the school district.

Processing is needed to prepare a book for circulation. Self-processing of library books in the school districts is more expensive than the purchased method. Costs vary from a high of $2.30 to a low of $0.65 per book. Jobbers can furnish shelf-ready books for $0.60 each.

Some districts are able to utilize voluntary help in their book processing. This lowers their per-unit cost. In districts where this type of service is available, a kit would be the answer and should take precedence over completely purchased processing. The annual saving to be realized will be more than $325,000.

5. Design traffic control systems in libraries to reduce pilferage.

Pilferage has become a major problem in secondary schools throughout the state. Book inventory losses have been estimated to be as high as 3% to 4% of total library volumes. At a cost of $5 per book, this would represent approximately $975,000 per year. Poorly designed libraries contribute to the problem. Often, check-out desks are located in areas which make it difficult to control pilferage. Therefore, school administrators should consider redesigning or remodeling their libraries to reduce thefts.

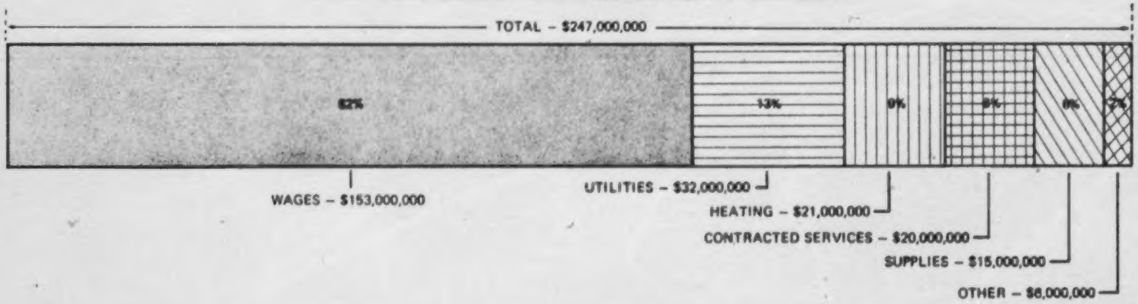
Detector devices are also available. In one district surveyed, pilferage decreased from an annual rate of 6% to 0.46% through use of such equipment. This represented an approximate annual saving of $7,300. It appears that detection systems would be particularly applicable to libraries which spend from $2,000 to $2,500 for replacement books. Small units with high pilferage might also investigate these devices.

Implementation will provide an annual saving of at least $975,000. The one-time cost is estimated at $6.3-million.

Building Operation and Maintenance

Management of the Illinois school system includes responsibility for janitorial and maintenance services in more than 5,800 buildings. Reported costs for these functions exceeded $247-million in the 1970-1971 period, a sum equal to 9.3% of total expenditures. Wages, the most significant single item, amounted to approximately $153-million or 62%. These data are depicted on the chart shown below.

1970-1971 OPERATING AND MAINTENANCE EXPENDITURES



A wide variety of practices was found with respect to management and work force utilization, management techniques, purchasing and inventory control, cost reduction programs, and facility planning.

The management staffs and custodial/maintenance work forces differ greatly from district to district. Organization tables range from a district having a director of building and grounds, who in turn, has a full-time architect, engineer, as well as several custodial and maintenance supervisors on their staffs, to those with only custodians. Sizes of these custodial work forces vary significantly.

Based on the districts surveyed, the work forces range from 1.4 to 14.8 custodians per 1,000 students. The national average is 5.45. Certain districts also have custodians performing minor maintenance work in addition to normal janitorial chores. Others confine their people to the latter. Generally, however, mechanical, electrical, and carpentry work is contracted.

Some of the larger districts and, in many cases the unionized ones, have a complete complement of special maintenance personnel. Differences in work forces and duties largely account for operating and maintenance costs per square foot ranging from $0.52 to $1.68.

Management techniques with respect to building operation and maintenance, also vary tremendously. This results in a wide range of management tools, controls, and training procedures being employed. The well-organized districts constitute approximately 25% of the study sample. These districts frequently employ job descriptions, formal scheduling methods and work standards, meaningful budgets, and work request systems. Likewise, they tend to use training aids, including orientation, manuals, custodial workshops, and maintenance seminars. However, these aids, techniques, and controls were not generally evident in the majority of districts. Others had some control systems, but lack the management to make use of them. Additionally, no evidence was found in the districts surveyed of any guidelines, advice or training offered by OSPI in this functional area.

In many of the districts, the operations and maintenance employees play a significant role in the purchase of supplies and services. This responsibility ranges from being able to purchase freely — the appropriation being the only restriction — to situations where formal purchasing procedures were employed and board approval required for nearly every acquisition. The more informal approach was typically the case observed.

One problem, that seemed to plague practically all of the districts, was the lack of warehouse space for custodial and maintenance supplies. When space was available, only a few school districts utilized formal inventory control systems to monitor the goods stored.

A few school districts are following practices to reduce maintenance costs. Several attempted to employ vacationing students and teachers to perform cleaning and painting chores at reduced labor rates. A few have commodity testing programs for janitorial and cleaning supplies to identify improved products. Preventive maintenance programs were rarely found except for safety equipment and boiler inspections which are required by law.

The school districts with custodial/maintenance management staffs frequently become involved with architects in selection of materials and planning storage and maintenance areas in new construction. Their concern was getting low maintenance materials such as plexiglas windows, ceramic and glazed surfaces, and carpeting into the material specification. Those districts with no management concern for custodial services give little consideration to material selection and space allocation in the planning of new facilities.

EVALUATION

Illinois school buildings and facilities are generally well maintained. Of primary concern is the excessive cost of maintaining the degree of excellence found in the system.

School operating and maintenance costs for the 1970-1971 period were $117.33 per student, substantially higher than the midwest average of $85.45. Primary causes of this higher-than-average cost are the quality of custodial/maintenance supervision, lack of adequate management controls, and absence of any purposeful cost reduction programs. Furthermore, no guidance is available from OSPI.

All too frequently, the custodial supervisor had been promoted from the ranks on the basis of tenure, loyalty, and hard work. These attributes are desirable in management positions but so is the ability to manage. Oftentimes, these individuals lack an awareness of financial controls, manpower utilization, inventory controls, and human relations knowledge.

Very few of the school districts could demonstrate they were using any form of work measurement or scheduling. In most of them, maintenance personnel were not even aware of their budget limitations. Awareness of management techniques was found to be generally lacking in a large percentage of the districts visited.

Many of the school districts seemed to be attempting to utilize excess custodial labor in place of closer supervision and controls. Frequently, six to eight custodians and as high as 15 per 1,000 students are used, compared to the national average of 5.45.

RECOMMENDATIONS

1. Establish a management services group to provide local school districts with guidelines, information, and consulting assistance services in facilities, operations, and maintenance.

Meaningful facility operating data are generally lacking throughout the state. Smaller school districts do not have the management resources to establish or use sophisticated control systems. Larger district management groups are not furnished with data to contrast their systems and standards with operations in others.

A management services group should be established to disseminate information on work performance standards, organization data, cost control systems, and ideas. Furthermore, this group should directly assist the smaller districts to implement improved systems and controls, particularly those directed at reducing high labor costs and waste. This state-level group should be staffed with industrial engineers and other professional personnel to assist lagging school districts in implementing cost reduction efforts.

The benefits, aside from cost reduction, would be cleaner and more efficiently run facilities because of better allocation of labor and materials. Statistical reporting to the state would also improve if the districts were using comparable work standards, budgets, and other management systems. Compiling these data and relaying the results to the districts would help them determine their relative performance. In addition, the information distributed on materials and supplies would lead to more standardization and, consequently, improved procurement practices.

Conservatively, a minimum of 1% of the total operating and maintenance expenditure would be saved through the reporting and direct assistance efforts of a management services group. Based on fiscal 1971 expenditures, this saving would amount to $2.47-million annually. Net savings, after the estimated cost of the staff consisting of nine professionals as well as five secretaries and clerical people would be about $2.21-million per year.

2. Establish supervisory positions for the building operations and maintenance function at the school district level where feasible.

Custodial and maintenance personnel are generally inadequately supervised and trained. When they do receive direction it is frequently from a head custodian or an academic administrator. Such supervisors usually do not have the time, inclination, and training to organize work efforts, use management tools, and control costs. As a result, the per-student operating and maintenance cost in Illinois is more than 37% higher than in other midwestern states.

The lack of custodial supervision, directors of buildings and grounds or supervisors depending on district size, is the major reason for the larger than necessary work force. In addition, inadequate supervision, in many instances, has had a detrimental effect on economical use and acquisition of equipment and supplies. Frequently, districts lacking these positions had no one to compare equipment and material performance between facilities. Qualified supervisory personnel, using work measurement standards, scheduling techniques, and cost controls would better allocate their custodial labor, equipment, and materials thereby reducing costs.

Real cost reduction potential can be demonstrated by the fact that survey information showed custodial forces range from 1.4 to 14.8 custodians per 1,000 students as compared to the national average of 5.45. The mode was approximately seven custodians per 1,000 students.

Based on the survey sample, 32% of the districts had work forces greater than the national average. Using a conservative 25% figure for overstaffing, total savings of over $10.91-million per year can be achieved through improved supervision.

3. Restructure school district procurement practices and systems and establish procurement personnel positions in the larger districts.

Standardization of materials and supplies specifications is generally lacking which, in turn, limits quantity buying. Inventory systems were also deficient, because of the unnecessary number of items used and lack of knowledge of inventory control techniques.

Additionally, there is a general absence of competitive bidding and quantity buying. Consequently, prices paid for janitorial and maintenance supplies tend to be excessive.

Procuring materials and supplies locally, regionally, statewide, and through federal agencies as recommended by the Illinois Budgetary Commission would increase the buying power of each district. Employment of professional procurement personnel having the time and training would eliminate many costly current practices. In the absence of a procurement specialist, each district should examine its materials and supplies specifications, quantity buying, and bidding practices.

Buying through regional associations, state, and federal agencies would provide districts with better prices as demonstrated in the Illinois Budgetary Commission report dated May 1972. This report showed savings of 20% to 60% of list price based on experiences of two out-of-state buying cooperatives. In addition, those districts obtaining federal aid can, with prior approval, buy through the General Services Administration (GSA).

Establishment of a procurement specialist in each of the larger school districts would assure recognition of many procurement economies. In the absence of such a specialist, a review and improvement of procurement practices would bring about substantial savings. Conservatively, a saving of 5% or $1.75-million could be realized through improved custodial and maintenance supplies purchasing, and is included in the section on Purchasing and Warehousing.

4. Analyze and audit electric power, water, and natural gas utility bills and contracts periodically to determine proper rate applications and billings.

There are over 1,100 districts having contracts for one or more electric, water, and natural gas utilities. Usually, these contracts are complicated instruments requiring special knowledge to analyze and interpret.

Further, there is no regulation which requires utilities to state that their customers enjoy the lowest available cost. Consequently, industries and institutions have recognized that contracts and rates are traditionally misapplied. As a result of the savings potential, industries are, with increased regularity, hiring consultants or employing their own specialist.

Professional evaluations and auditing of utility contracts and rates by an internal specialist or outside consultants would determine the extent of possible savings. Hiring an outside consultant to study the contracts for one year at the state level, would determine if this should be a continued practice and whether or not it could be handled by an internal specialist.

Audited savings to the state range as high as 10%. A conservative estimate of 5% will produce an annual saving of $1.38-million. The one-time cost of this audit is equal to one-half of the first year's saving or $685,000.

5. Share school facilities and grounds with other institutions and government bodies to reduce maintenance costs.

Certain facilities and grounds have a low utilization rate but still represent an on-going maintenance cost. This situation results from planning, constructing, and utilizing accommodations with limited scopes.

School facilities are usually planned without regard to park and forest preserve district plans and vice versa. This limited planning has resulted in higher than normal construction and maintenance costs for public institutions.

Schools tend to have a higher utilization of physical education facilities during September through May, while park and forest preserves have a higher June through August rate. By merging, a reduction in such facilities and accompanying maintenance costs can be achieved. Likewise, other maintenance responsibilities, such as the snow-removal, could be shared by city and town governments who may be better equipped than the school district.

Benefits of shared facilities would reduce capital and operating costs. Secondly, the quality of upkeep should improve. Furthermore, the school districts could concentrate on building maintenance and forego the purchase of grounds maintenance equipment.

Facilities Planning and Space Utilization

Over the last five years, Illinois school districts have spent an average of $170-million per year on school construction. This figure does not include equipment, land, interest costs or buildings constructed by public building authorities. The planning which precedes a district building effort ranges from comprehensive, long-range programs to single, hastily conceived projects.

Population and enrollment estimates, together with a cursory examination of present utilization data, are the usual basis for establishing new construction needs. In some districts, the information is gathered by the school staff. In others, the responsibility is delegated to a citizens' committee or consultant. Actual kindergarten and lower grade enrollment figures are a major input in the facilities planning process.

In a few districts, information on community and enrollment trends is carefully compiled and analyzed. In most, however, such data are casually obtained for informal use only. Little interdistrict planning is done except in regard to special and vocational facilities to be used on a cooperative basis. Sufficient consideration does not appear to be given to possible district mergers despite the fact that a consolidation program has been in existence for years.

Building sites are usually procured several years in advance of construction. The selection is customarily made by the local school board and superintendent. Occasionally, an architect is included in the process.

When additional facilities are authorized, an architect is engaged to prepare preliminary drawings based on the educational specifications of the district. In some cases, existing facilities are reviewed for possible renovation. Cost estimates are prepared by the architect and financing plans developed by the school treasurer or local board. When a bond issue is involved, considerable time is devoted to informing the public of the need for the new facility. If the referendum is successful, the architect will work with the school administration and the teaching staff to develop a final design. A few districts include maintenance and custodial supervisors in this process.

Districts which do not have bonding power for additional facilities may use the services of the Illinois School Building Commission, now a part of the newly created Capital Development Board. In fiscal 1971, some 10% of the total dollars spent on school construction was provided in this way. When these resources are used, the commission provides project supervision and sets certain cost limits.

Design and material specifications may be obtained from the architect, the Illinois School Building Commission, trade journals, school planning centers or other school districts. The primary source is normally the architect. Only limited assistance is available from OSPI and many district superintendents expressed confusion regarding whether local or state building codes take priority.

Districts with overcrowded facilities handle the problem in several ways. The most prevalent is the staggered starting system which extends the overall time of school operation. Eliminating courses and authorizing double sessions are other methods in use as are space rental and utilization of portable facilities. One district has inaugurated a 12-month program to provide better space utilization. In general, facility sharing between districts is limited to vocational and special education centers.

Most districts appear to consider any student use of a classroom as full occupancy. What information does exist is used mainly for class scheduling. High school occupancy ratios ranged from 83 square feet per pupil to 224. In elementary schools, variations went from 39 square feet to 110. Many special purpose learning centers had very low occupancy and minimum usage.

OSPI establishes the minimum school year requirement. In 1971-1972, it was set at 180 days. The total value of school facilities now in use is approximately $3.5-billion exclusive of transportation equipment. Despite the size of this investment, there is almost no space utilization data available.

Attempts are being made to improve facility flexibility by incorporating concepts such as open planning and pod designs. The lack of basic data, however, precludes meaningful planning efforts within the various school districts.

EVALUATION

Illinois school districts do not have a consistent source of information regarding facilities planning and space utilization. The results are generally poor evaluations of the need for new school construction. Planning is limited to estimating the number of pupils per class and forecasting the population and school enrollment trends.

Adequate preparation should include sound population and enrollment projections as well as thorough analyses of space utilization. Proposed facility usage should include consideration of multi-purpose rooms, facility sharing with other institutions, staggered class hours, renovation of existing schools, and consideraation of a 12-month school year.

Site selection is seldom accomplished in a professional manner. Frequently, unconsidered factors such as topography, subsoil structure, availability of utilities, and transportation requirements can result in significant cost penalties. In addition, no effort is made to utilize land secured well before planned construction as a means of additional income to the local district.

Architectural services rendered to the districts vary with the architect's experience with school construction. While some provide advice in regard to design and material specifications, others design buildings which increase operating and maintenance costs. The confusion with respect to local and state building codes further complicates the problem.

At present, no standards exist for space utilization within Illinois school facilities. As a result, adequate determinations of space requirements — both in scheduling utilization of present facilities and planning for new ones — are not made. Low use of learning centers, minimum scheduling of single-purpose rooms, and vacant rooms coupled with the wide range of occupancy ratios indicate the need for improved space utilization. A lack of recorded utilization data prevents districts from making an effective effort to improve the situation.

RECOMMENDATIONS

1. Develop realistic facilities planning guidelines, standards, and information for use by local districts.

Generally, poor evaluations of the need for and design of new school facilities result in unnecessary construction and increased costs. A basic problem is the lack of a consistent source of information concerning facilities planning. Therefore, a qualified staff should be established in an appropriate state agency to develop guidelines, standards, and information concerning facilities planning. The proposed group would examine existing information and establish a set of consistent standards applicable to the Illinois school system. In addition to overall guidelines, standards are needed in the following areas:

- Accurate and consistent methods of measuring space utilization.
- Techniques for analyzing space utilization.
- Content of educational specifications.
- Methods of forecasting population and enrollment trends.
- Standards for determining the feasibility of renovating existing buildings.
- Methods for modernizing present facilities.
- Criteria for school building design to increase flexibility, efficiency, and minimize cost.
- Standards for the selection of an architect and information on establishing relationships among the architect, school administration, local board, and contractors.
- Data on professional selection of school sites.
- Guidelines for effective use of citizens' groups or committees.
- Methods of financing new facilities.

It is conservatively estimated that more efficient space utilization in existing and new buildings would produce a 7.5% reduction in classroom construction. The annual saving to be achieved, based on 1971 construction rates, would be $11.9-million. The estimated annual cost of a 26-man staff to develop the necessary guidelines would be $600,000. Personnel should consist of professional educators, facilities design and utilization specialists, economists, public relations and financial specialists, and internal consultants to assist local districts in utilizing the guidance provided. The net annual saving to be realized through implementation will be $11.3-million.

2. Use a systems approach for the design and construction of new facilities.

To a large extent, traditional methods of custom design and construction are still utilized in building educational facilities. This approach involves unnecessarily high costs. In recent years, the systems design concept has evolved as a practical means of reducing expenditures. However, little knowledge and even less use of this method was noted during the study.

The systems approach involves utilization of standard designs for major building components such as walls, climate control, ceilings, plumbing, and electrical systems. The major economy is achieved through off-site fabrication of components, although design costs are also lower. Further savings result because total design time is compressed and construction can begin before the contract drawings are completed. Typically, the systems concept accelerates building design by two to three months and, in light of the continuing construction spiral, construction may start earlier and cost less.

Full utilization should be made of the systems approach in the design and construction of school facilities. Experience obtained in Illinois, Indiana, Maryland, Florida, Georgia, and elsewhere indicates a potential saving of at least 10%. Illinois school districts (excluding Chicago) built 2,897 classrooms at a cost of approximately $159-million in fiscal 1971.

Conservatively, 40% of these could have utilized a systems approach for an annual saving of $6.4-million. Savings claimed do not include future increases in construction costs or the projected rise in the number of classrooms to be built.

3. Require school districts to submit building plans to a state agency for a thorough review prior to the letting of construction contracts.

At present, there is no professional review of facilities plans to ensure that contemplated buildings have been designed in an efficient and economical manner. The need for new facilities is determined solely at the local level. Also, there is no procedure to determine that maximum efficiencies are obtained in building design, construction technology or material use. Except for districts which use the services of the Illinois School Building Commission, the result has been unnecessarily high facility construction and maintenance costs.

To eliminate this problem, a state-level authority to inspect and approve local districts' building plans should be established. This would help ensure the most efficient and economical use of construction funds. It is estimated that at least 3% or $4.8-million in construction costs can be saved annually through a thorough review of building plans.

The proposed authority would establish building construction guidelines regarding innovations in construction technology and material usage. It would also provide assistance in the development of district construction plans and inspect such plans prior to construction. This agency should be staffed with at least seven people including competent professional educators, architects, and construction engineers. The annual cost is estimated at $300,000. Therefore, implementation would provide a net saving of $4.5-million per year.

4. Collect information concerning residential developments.

Lack of advance information regarding new residential developments is a hindrance to forecasting population and enrollment trends. Such data are necessary to plan future facilities as well as for full utilization of existing buildings. Local districts should collect information concerning the number, location, type of unit, estimated value, and anticipated occupancy schedule of housing developments.

This information should be provided in connection with applications for development approval or building permits. In addition, a procedure should be established to forward information regarding transfer of, and options on large land areas to the districts.

5. Obtain a legal opinion as to the order of precedence for various state and local building codes.

There is a lack of understanding regarding the precedence of state and local building codes governing school construction. The confusion which currently exists complicates the facilities planning process.

Therefore, the Attorney General should be requested to rule on the order of precedence of the building codes. This would increase the efficiency of the facilities planning process in both new construction and building alterations.

6. Study the year-round school program concept as an alternative to the construction of new facilities.

There is a growing need for new schools although present facilities are relatively idle for three months of every year. Therefore, a state agency should study and promote the year-round school concept where feasible.

It is recognized that this approach is controversial and may not be practical for many districts. However, those districts faced with an urgent need for new facilities could realize substantial savings in new construction by adopting the program. Due to a lack of sufficient data, it is impractical to attempt an estimate of potential savings. One school district in Illinois, which has had a two-year experience with the program, has increased the capacity of its present facilities by over 30%. A net saving of more than 7% of the school's total budget is being achieved.

School Construction

Over the past five years, school districts in Illinois have spent an average of $170-million annually for building construction. This is approximately 7% of the total operating budget. During fiscal 1971, construction totaled $179-million, site acquisition and improvements amounted to $18-million, and building equipment expenditures were $37-million.

Last year, 114 schools were completed with individual facilities costing up to $10-million. Reported building costs range from $16.20 to $50 per square foot in the districts surveyed. The Illinois School Building Commission, which finances construction in certain instances of district financial constraint, has established building cost maximums of $19.95 per square foot for elementary, $22.08 for junior high, and $23.50 for senior high schools.

School districts are responsible for providing facilities to meet necessary educational requirements. Involved is the selection of an architect, development of plans, choosing of contractors, and supervision of construction. Some architects are selected for their expertise in school design, amicable relationships within school boundaries or because they reside in the district. Most districts involve the architect extensively in facility planning and rely upon his judgment for basic design and cost estimates. However, a few develop educational specifications and research acceptable per-square foot or per-student cost estimates on their own before approaching the architect.

Districts requesting "turn key" buildings from architects generally pay more than those who order and install certain items such as movable equipment, carpeting, and lockers. Typically, architectural fees average 6% of the total contract cost.

The development of plans determines the complexity and cost of the project, building flexibility, future maintenance, and operating costs. There is a wide variety of approaches within the districts to interior and exterior designs.

Some districts are aware of the need for improved flexibility as they try to adapt their older buildings to current educational requirements. Many are being pressured by citizens groups to consider modernization of facilities in lieu of new construction. Generally, the cost to modernize facilities that are approximately 50 years or older to be in compliance with the Life-Safety Code (the minimum standard for fire against all Illinois education facilities) is extremely costly.

New school building plans include many degrees of flexibility which are achieved through use of movable partitions, multipurpose rooms, and improved layouts. Cafeterias, auditoriums, stages, hallways, and gymnasiums are being designed for multipurpose use.

Economy in building operations receives limited consideration in building design. Generally, the architect makes final material selection based upon his experiences. There is substantial evidence indicating little consideration is given to operating and maintenance cost aspects of the material selected. The extensive use of glass is a common practice but causes high utility costs and increased maintenance due to vandalism and accidental breakage. In some instances, the selection of hardware for doors and windows is made without consideration of the cost of replacement.

Economy is also affected by the location of various building functions. Frequently, maintenance and custodial work areas and supply rooms are limited. Rooftop heating units tend to receive minimum attention during extreme cold weather resulting in frequent failures and high maintenance costs.

School districts usually delegate responsibility for obtaining qualified contractors to the architect. Contracts for new construction are bid in different ways, ranging from a small prime contract to multicontracts on larger projects. Districts utilize either full- or part-time construction supervision from the architect.

In addition to new building construction, many districts are involved in renovation of existing facilities. Building renovation projects are, in many instances, initiated to meet the Life-Safety Code requirements. In other cases, structures are modernized to provide the flexibility and building features required by current educational programs.

EVALUATION

In most cases, school districts rely on an architect for planning, designing, selection of materials, and supervision of construction. Many architects have expertise in these areas. Others have exhibited limited judgment exemplified by poor material selection, illogical layouts, improper space utilization, and costly construction features.

The exceptionally wide range in construction expenditures indicates a generally poor cost control system. Lacking is a readily available and consistent source of construction costs, designs, and planning guidelines. High building costs may be attributed to such factors as elaborate building design, expensive materials, and complicated construction requirements resulting in high on-the-job labor charges. In addition, public, political, and labor demands as well as unnecessary adornments and facilities, uncertainty over conflicting building codes, and restrictive labor practices increase building cost.

Generally, operating and maintenance cost records on specific buildings are poorly and inadequately maintained. As a result, district officials are poorly prepared to convince voters of the need for new facilities. Currently, districts are renovating uneconomical facilities and, as a result, perpetuating high operating costs.

Some recently constructed buildings do not have good functional design and many more lack built-in flexibility. Examples of poor flexibility such as use of masonry walls in lieu of movable partitions, poor placement of electrical conduit, control centers, mechanical piping, and ductwork were noted in both traditional and open-concept schools. Provisions for future air conditioning and preparing for future educational system technology changes are generally lacking.

RECOMMENDATIONS

1. Select the architect based upon his expertise in school building design.

Several recently constructed schools are poorly designed with respect to functional adaptability, use of materials, and flexibility for future changes. In many cases, exterior aesthetics have been stressed over a functional layout, habits of students have not been reflected in material selection, and built-in flexibility to meet rapidly changing programs have been neglected. In other schools, the architect and school district spent much time and money in developing specifications which were previously conceived and used by other architects.

Architect selection should be based upon demonstrated expertise instead of various political reasons such as relationships and residency within district boundaries. Where a thoroughly qualified architect is not available locally, a competent architect-consultant should be retained to work with the local school board. The practice will not increase architectural fees since it involves proration of the fee.

This selection practice will result in providing needed expertise on a more consistent basis. In this way, provision can be more adequately made for in-built flexibility, facilitating adaptation to changing educational programs as well as greater concern for sound design, construction, and operating costs.

2. Utilize the system design concept.

Generally, school construction is accomplished by traditional methods of custom design and nearly total on-site fabrication. Use of these methods increases the time required and costs involved. System design has evolved in recent years as a practical means of reducing costs. Little knowledge and even less use of this concept was observed during the study.

Full use should be made of the system design approach where practical on new construction, additions, and renovation projects. It will result in a cost saving of at least 10% on the project. Benefits from implementation of this recommendation are included in the Facilities Planning and Space Utilization report.

3. Remove the procurement and installation of building equipment from the architect agreement and building contract.

Building equipment such as tables, desks, chairs, lockers, and carpeting exceed 10% of new construction costs. In fiscal 1971, approximately $35-million was spent on these items. The architect specifies them and the contractor furnishes and installs lockers and carpeting. In many cases, there is no standardization of material and material selection is left to the architect. Fees totaling 6% and 15% of the installed price, charged by the architect and contractor, respectively, are not necessary.

Selection of this material should be removed from the owner-architect agreement, and procurement and installation stricken from the building contract. It is conservatively estimated that $500,000 annually in architects' fees only would be saved.

4. Install air conditioning or make provisions for future systems in new construction.

Present building flexibility is limited by the absence of proper temperature control. Thus, extensive use of the year-round school concepts and the compact school designs without abundant natural ventilation are limited.

Building limitations caused by inadequate temperature control should be evaluated. Where economically practical, air conditioning should be installed. If not, provisions for future air conditioning should be considered. In many cases, the cost of installing and operating air conditioning will be offset by improved building usability and lower general construction costs through compact building designs. Such design reduces site requirements, minimizes wall and roof areas, and shortens corridors.

Air conditioning is necessary in compact design. In addition, provisions for piping and ductwork installation and electrical service capacities cost less while the building is being constructed than when added later.

5. Reassign administration of the School Life-Safety Code from OSPI and the ESR to a separate agency.

The OSPI and ESR are not organized or staffed to effectively administer the School Life-Safety Code. Administration is left primarily to each architect who surveys the buildings as most ESR staffs possess limited technical knowledge. OSPI interests are curriculum-dominated and have been limited primarily to interpreting and reviewing the code. This code could be more efficiently and effectively administered by a separate agency which reviews all school building plans as outlined in the Facilities Planning and Space Utilization report.

Pupil Transportation

During the 1970-1971 school year, Illinois schools furnished daily transportation to over 742,000 regular kindergarten through grade 12 students. This represented 35% of the state's average daily attendance of about 2.2-million students. The cost of this service exceeded $49.8-million or $67 per pupil. Not included are grants of $6.795-million to mass transit companies which provided reductions of up to half fare for pupils. Transportation costs for that school year increased by 14% over 1969-1970, while per-mile operating costs rose approximately 18% from 1969-1970 to 1970-1971.

Over 93% of the state's 1,140 districts provide student transportation. Generally, they follow specifications of the Illinois School Code in determining their transportation programs. It requires community consolidated, community unit, consolidated, and consolidated high school districts to provide free transportation to pupils residing more than 1.5 miles from their assigned attendance center. The code, additionally, requires public school districts to provide similar free transportation to other than public school students. Approximately 5% of transported students attend nonpublic schools.

Many districts supplement this basic free busing policy by:

- Transporting students living less than 1.5 miles from their attendance center but residing in areas where walking to school is considered to be hazardous.
- Conveying noneligible pupils as a convenience to parents.
- Busing students who participate in extracurricular activities.
- Providing services to students in classes with small enrollments to eliminate buildings.
- Transporting school children participating in programs not available at their attendance centers.
- Busing pupils to achieve socio-economic or racial balance stemming, in part, from federal and state policies.

In the districts surveyed, excluding Chicago, 55% of the students were transported by district-owned and operated fleets, 41% by contract carriers, and the remaining 4% through a combination of ownership and contractors.

Vehicles range in size from small buses to transport four wheelchair students to units capable of handling 84 passengers. Route designation techniques range from haphazard guesswork to computer programs. Some districts use their vehicles for single trips to and from schools while others stagger starting times and use their units for three or more trips. Most designate centralized student pick-up areas while others still provide door-to-door service.

Discipline of students being transported is an increasing concern for officials. As a result, some districts maintain employees to observe and police student behavior. Others prepare and distribute brochures outlining rules and penalties. However, most administrators allow drivers to cope with the situation individually.

Avoidance of discipline problems is often cited as a prime reason for switching from district-owned operations to transportation contractors. Additionally, it eliminates lump-sum investment in new vehicles and maintenance facilities and transfers such burdens as equipment breakdowns, parts inventories, supply purchases, and parental complaints to private contractors.

The OSPI and superintendents of the Educational Service Regions provide aid with reimbursement calculations and report completion. However, these offices are not staffed to provide assistance with fleet design, vehicle selection, maintenance or any of the other business aspects of pupil transportation. Consequently, each district determines its own transportation needs.

Drivers are drawn from sources such as off-duty firemen and policemen, district maintenance and custodial employees, area college students, and housewives. Compensation is generally based upon an hourly rate, although some drivers receive full-time salaries for driving and performing minor maintenance.

The fastest growing expense to all districts involves busing of special education students. In this area, typical operations are characterized by small vehicles, door-to-door pick-up, and high per-pupil costs. This trend will accelerate with compliance to a recently enacted state law requiring extension of special education programs to three to five-year old pupils. Currently, the state reimburses 80% of all costs incurred in transporting these students.

EVALUATION

It is economically unsound to construct elementary and secondary schools within easy walking distance of all students. Therefore, transportation of pupils is a necessity. Illinois does a commendable job of moving students quickly and safely to and from school. However, several changes must be implemented to achieve an efficient transportation system.

Well over 1,000 districts make individual arrangements for transportation, and practically no coordination or communication exists between districts. As a result, adjoining districts frequently operate similar bus routes and separate maintenance facilities.

The most efficient pupil transportation operations are those large enough to justify a professional transportation manager as well as obtain quantity discounts in vehicle and materials purchases. To achieve the same degree of proficiency, the smaller and medium-sized districts must combine their operations. Routing and scheduling would, likewise, become more effective if done on a multi-district basis.

Although some districts appeared to have economical contract operations, many others use private carriers to avoid the responsibility of managing a bus fleet. The contract operator provides no service which could not be performed by district-owned fleets.

State standards for driver selection appear adequate although they exclude persons under the age of 21 years. However, it is becoming difficult to hire qualified personnel who are willing to work two to three hours a day for relatively low pay driving buses often containing over 60 students. Officials are well aware of the discipline problems involved in transporting students. However, few districts have taken the necessary action to implement methods for handling these factors.

The amount and cost of extracurricular transportation appears to be growing. More definitive policies are required to control this expense. Likewise, immediate attention is needed to examine the costs and characteristics of special education transportation. The present 80% reimbursement formula does not provide any incentive for the districts to seek economy.

RECOMMENDATIONS

1. Expand the use of owned or leased transportation fleets.

Approximately 34% of the vehicles used in transporting students are owned and operated by private contractors. Many districts resort to this arrangement to avoid administrative problems of operating a fleet. However, this is an expensive arrangement.

The total annual cost per student in districts operating fleets was $46 compared to $70.65 for those utilizing private contractors. This margin of $24.65 seems conservative in comparison to a recent study of transportation costs made by an Educational Service Region superintendent of a large county. That study reported contract transportation costs exceeded district-owned transportation charges by $29.83 per student.

The differential between district owned and contract transportation is explained by the following facts. For the most part, contractors must pay all local, state, and federal taxes, while school districts are exempt. Generally, they amortize their vehicles over a four-year period, compared to at least seven years in district-owned operations. Also, these private firms must earn an acceptable profit to continue their business. Those districts using contractors should be encouraged to acquire and operate their fleets. This goal could be accomplished by changing the code to require district ownership or by creating an incentive in the reimbursement formula which is sufficiently strong to convince them to convert from contract to owned fleets.

During 1970-1971, Illinois schools transported 742,000 students daily and 34% of these were based in vehicles operated by private contractors. Using the margin of $24.65 per student, district-owned transportation would save $2.3-million annually net of leasing costs or interest charges and debt retirement if owned.

2. Amend the statutory law to allow drivers under 21 years of age to operate transportation vehicles.

School districts are experiencing increasing difficulty hiring and retaining drivers. Only a few adults are willing to work the inconvenient hours to drive buses. Many districts are forced to guarantee longer work days and higher wages to fill these positions.

Illinois law requires all bus drivers obtain a chauffeur's license and stipulates individuals must be at least 21 years of age. This law should be changed to allow 18- to 20-year old drivers to operate school buses. Other states have similar provisions which allow 16 year olds to drive buses. Obviously, these states have simultaneously instituted programs to ensure careful selection and thorough training.

The use of persons who are less than 21 years of age would virtually eliminate the problem of locating and hiring a sufficient number of operators. Those selected would receive an exceptional opportunity to further develop individual responsibility and leadership qualities. Additionally, salary expenditures would be reduced by more than $4.4-million annually since these drivers could be hired for wages near the present minimum federal hourly rate, which is significantly less than the prevailing driver rate.

3. Charge fees for extracurricular transportation and for transporting students living less than 1.5 miles from their attendance centers.

Under present state law, districts may provide transportation to pupils living less than 1.5 miles from their schools. They are also allowed to charge those pupils for the cost of providing the service. However, not many districts recover this cost. Additionally, they may transport pupils to and from school-sponsored activities. Although state law stipulates a charge be made, few districts collect enough to offset the cost.

Extracurricular transportation and busing students who live within 1.5 miles of their attendance centers cost Illinois approximately $8.6-million during 1970-1971. Some districts assess student fees in an effort to offset the costs, but those collected for the state totaled less than $2.5-million in 1970-1971.

The law should be revised to require districts to collect the full cost of extracurricular transportation from participating students. An appropriate code revision would generate additional annual income of approximately $6.2-million. Occasionally, an audit of a few randomly selected districts should be conducted to ensure collection of these fees. All fees should be reviewed on an annual basis to reflect changes in operating costs.

4. Transfer responsibility for business aspects of pupil transportation to the Department of General Services.

State assistance to local school districts for pupil transportation and fleet management is limited to administration of reimbursement funds, development of safety standards, and compilation of statewide statistical data. Operation of pupil transportation programs, purchase of vehicles and supplies, and business aspects of transportation are left to district personnel. Practically every district indicated a need for state assistance in these areas. However, the transportation section of OSPI is not staffed nor trained for this purpose.

A solution would be to transfer responsibility for the business aspects of pupil transportation and bus fleet management from OSPI to the Department of General Services. Then, structure the organization of the Bus Fleet Cooperatives proposed in the Fleet Management report so that fleet managers would report to General Services management.

The Department of General Services is responsible for the purchase, operation, and maintenance of state highway vehicles. It should, therefore, possess the necessary expertise to provide technical business assistance in the area of efficient transportation practices. Existing state garages and personnel should be used where possible for maintenance and repair of school buses.

Additionally, this organization would help eliminate the communication barrier that currently exists among local districts. Centralized computer services could record fleet expenses and operational data, prepare reports containing meaningful comparative statistics, and provide vehicle routing and scheduling. The direct monetary saving of such an organization is impossible to predict but will be significant.

Bus Fleet Management

During the 1970-1971 school year, approximately 93% of all districts provided some type of bus transportation service for their students. These included travel to and from school, transportation in connection with curricular and extracurricular activities, and busing to improve classroom utilization as well as achieve racial balance. A complement of about 8,800 buses was used to transport some 742,000 students. Of this total, 66% of the buses were owned by the districts and 34% by private companies which provided contract services. At least one district contracts its busing needs with bus owner/drivers.

Fleet size for those districts which own their buses range from 100 or more vehicles to a single unit. Generally, fleet management activities include:

- Scheduling and routing of buses.
- Employing and training school bus drivers and mechanics.
- Negotiating contract services.
- Establishing bus replacement guidelines.
- Updating bus specifications.
- Purchasing buses and supplies.
- Supervising maintenance and service of buses.
- Maintaining good public relations.
- Obtaining insurance for the fleet and drivers.
- Maintaining safety standards and inspection requirements.
- Handling pay negotiations.

Bus maintenance is contracted to local service stations or dealerships in certain districts. Others have large heated garages with space for the entire fleet plus a workshop, parts storage, and offices. Some districts purchase buses by competitive bids. Many bid both the body and chassis separately. Few take advantage of the state purchase price as most contend they can beat this cost through local bidding.

Bus life in some districts is automatically seven years without regard for condition. This period is established by state transportation reimbursement policies which allows 15% of the value to be written off each year. In other districts, a bus may be kept in operation for 15 years. Mileage, body condition, and general mechanical condition are factors considered in bus replacement decisions.

Few districts keep usable cost records on fleet maintenance. Consequently, they have little statistical basis for making repair-replace decisions or for providing grounds for accepting bids above the lowest bids on major purchases. Those districts which keep good records have developed interesting cost data on their fleet through the use of computers.

Purchasing, maintenance, and operating supplies such as oil, gasoline, and tires is done by the shopping method. An effort is made to keep the business in town in some districts. In others, supplies are purchased through competitive bidding in quantities large enough to allow substantial volume discounts.

Prices for school bus equipment and maintenance supplies vary depending on the purchasing methods used. For example, prices for tires range from $100 for the 9:00 X 20″ unit to $34 for a quality recap. Oil prices range from $0.15 to $0.59 per quart.

Bus mechanics employed by districts receive little training beyond what they gain from experience. Some districts employ high school students as part-time mechanics as part of a vocational education cooperative training program.

Bus drivers are selected from applicants who meet the following qualifications. They must pass a health and tuberculosis examination, have a chauffeur's license or a current driver's license prior to applying for a chauffeur's license, obtain a Red Cross First Aid Certificate, pass a school bus driver's examination, be 21 years of age, be of high moral character and maintain a good appearance, as well as have a good driving record free of convictions, license revocations, and unsatisfied judgments as a result of an accident. If these requirements are met, OSPI certifies that the individual is qualified and issues a certificate for one year.

Bus driver training ranges from a few rides on the bus as a passenger to learn the route, to multiple lectures on safety and passenger psychology and 20 hours of bus driving practice before assignment as a regular driver.

The OSPI provides an Office of Pupil Transportation Services which serves the following functions:

- Administers a bus and safety lane inspection.
- Certifies the bus drivers.
- Investigates accidents.
- Provides recommended bus body and chassis specifications.
- Publishes the Illinois School Bus Transportation Handbook which describes the state laws regarding state operation, design, bus driver qualifications, and other helpful information.
- Reviews transportation reimbursement claims.
- Coordinates training seminars.
- Maintains statewide records.

Present state reimbursement policy for pupil transportation is based on the number of pupils transported 1.5 or more miles to and from school. The dollar amount is based on one of the following formula: 80% of total operating cost of transporting eligible pupils; a reimbursement equaling the total operating cost of transporting eligible pupils minus district assessed valuation times a qualifying tax rate of 0.3%, 0.5% or 0.7%; and a flat grant of $16 times the number of eligible pupils transported 1.5 miles or more. The lesser amount of methods one or two is used for reimbursement if that amount is greater than the flat rate of $16 per pupil. If not, the flat rate is used.

During the 1970-1971 year, 95 districts were reimbursed under the 80% method at a cost of $3.2-million; 806 districts were reimbursed under the equalization method at a cost of $20.29-million; and 208 districts were reimbursed under the flat grant method at a cost of $1.74-million. In total, basic state transportation aid amounted to about $25.23-million.

EVALUATION

The Illinois districts which are involved in student transportation, move approximately 742,000 students daily for several school-related reasons with considerable ease. Although irresponsible waste is not evident in our study, there is obvious potential for improved efficiency and increased economy.

The size of many fleets is too small to justify employment of skilled administrators as well as mechanics to maintain the vehicles. Consequently, fleet administration falls to other district employees who lack experience in this field. As a result of nonprofessional fleet management, such things as disproportionately high fleet repair costs exist, inadequate repair shop facilities and tools are used, ineffective control of contract services are evident, and poor purchasing practices prevail. Also, there is a lack of comprehensive training of mechanics and bus drivers.

Excluding the flat grant method, state transportation reimbursement formulas provide districts with little incentive to minimize operating costs to develop effective, efficient management techniques or procedures.

RECOMMENDATIONS

1. Establish large cooperative bus fleets and centralized maintenance shops owned by participating districts.

The major problem in bus fleet management in the state is the small-scale operation of practically all district-owned bus fleets. An analysis made of those local districts which own their fleets revealed on a cost per 1,000 pupil miles, that the large fleets operated three times as economically as the smaller district-owned fleets. This is because the larger fleets could afford to employ trained personnel to administer their operations, establish excellent purchasing procedures, and buy large quantities to demand fleet discounts and transport lot prices.

In addition to reducing contracted services, expansion of the bus fleet into manageable units under the cooperative program can be accomplished with ease. In rural areas, countywide participation is feasible as student density is generally low and fleet mileage quite high. Interested districts should form a transportation board which will oversee the organization, implementation, and operation of the cooperative bus fleet as well as hire a competent fleet manager.

Urban districts in densely populated areas can form multi-district cooperatives. However, countywide fleets numbering nearly 1,000 buses would exceed the manageable limit. Buses will be operated and maintained by the cooperatives. Maintenance costs will be paid by the participating districts on a prorated share of the operating expense. Repair and replace decisions will be established by the transportation board and the fleet manager.

Funding of the cooperative should be accomplished by direct remittance of participating district transportation levies and state reimbursements. Cooperatives should account and report in the same manner as local school districts. Pending enactment of needed legislation, cooperatives should be formed and operated in a manner similar to special and vocational education cooperatives.

Initial savings will be made in the number of spare buses maintained by the fleet. In some districts reviewed, as high as 20% of the fleet were spares. As the fleet size increases, the percentage of spare buses will decrease. Consequently, a statewide decrease from approximatley 10% to 5% will realize a saving of 440 buses and a one-time saving of $3.74-million.

Expansion of maintenance shops will provide better utilization of work areas, tools, and inherently expensive bus maintenance equipment. Savings will be significant, but cannot be reasonably determined. The expert bus maintenance staff will be capable of gaining full utilization of the buses. Thus, bus life may be extended to a minimum of 10 years with mileages amounting to 150,000 to 180,000. If this can be accomplished, the savings accrued over a 10-year period will amount to approximately $30.5-million.

Overall, the cooperative bus fleet should save the state at least $3.05-million annually plus the one-time saving of $3.74-million. It is anticipated that additional savings can be realized through more efficient routing of buses, but the amount cannot be accurately determined. Utilization of existing personnel and facilities should preclude any added costs.

2. Create a flat rate reimbursement formula to encourage efficient and economical bus fleet management.

The present reimbursement methods, excluding the flat grant, provide a minimum of incentive for districts to economize on transporation charges or establish effective management techniques for reducing costs. Under the 80% or the equalization method, the total operating cost is the main basis for reimbursement; the higher the cost, the larger the repayment.

Using the 80% method, an efficient district's actual transportation costs may not differ greatly from that of an inefficient district. Therefore, the reimbursement policy should be geared to a flat grant based on per pupil, per mile, or per-pupil mile, whichever would be greater. Under this type of repayment, an efficient district would realize whatever cost savings it achieved. It is impossible to estimate the impact of such a proposal except that a change in procedures which removes a subsidy for inefficiency would be substantial.

3. Institute a bus fleet maintenance and cost reporting system.

Records of maintenance costs associated with the operation of individual bus units within a fleet are totally inadequate in most districts visited. No guidelines exist as to the economic feasibility of bus replacements. Further, all replacement decisions are based primarily on the unit's age.

A records system should be established to evaluate fleet operations. Data consisting of labor, material dollars expended, and repair information for each vehicle should be collected. Records pertaining to the miles the vehicle was driven by individual operators and miles operated on each route should be carefully maintained.

Analysis of data provided by this records system will result in more economical replacement decisions through better timing and bus type selection. Accountability among drivers for vehicle abuse and high cost routes can more accurately be determined, leading to appropriate steps to reduce expenses. At some future time, these data could be reported to a state agency for evaluation of bus fleets on a state-level basis.

4. Use student mechanics for bus maintenance in cooperation with the vocational education program.

In many districts there is a definite need for more skilled help in bus maintenance at a reduced labor cost. The local high school vocational education program can provide the bus maintenance shop with young men interested in automotive technology on a cooperative training program. These students can work part-time and accomplish many of the routine functions such as tire repairs, engine tuneups, and the like. With guidance from vocational instructors, the student can handle more complicated operations such as engine overhauls, major body repairs, and maintenance of critical safety equipment such as brakes and steering.

This arrangement will provide semi-skilled workers on a part-time basis at a reduced rate of pay for the school district. The students, on the other hand, will receive on-the-job training and pay for their efforts. If this program were initiated on a statewide basis, with pay for student mechanics established at or near the minimum wage scale, it is estimated that a saving of approximately $375,000 annually can be achieved.

Pupil Driver Education

All Illinois high schools and unit school districts are required by the Illinois Driver Education Act to offer a course in driver training. Normally, the program consists of 30 hours of classroom instruction and six hours of practice driving under the guidance of qualified instructors.

In districts which use driving simulators, 12 hours of simulator time plus three hours behind-the-wheel practice may be substituted for the six-hour driving requirement. Dual-control automobiles are used to comply with state requirements. A few larger districts use driving ranges where an instructor can observe up to 12 pupils at one time. To qualify for state reimbursement, courses which use simulators and/or ranges must include a minimum of two hours behind-the-wheel driving on public roads.

Driver training is taught by certified teachers who must also have a driver education certificate. In some districts, programs are restricted to regular school hours. In these, the instructor receives a regular salary as a teacher and may also teach other courses. In others, practice driving is offered during nonschool hours. In these cases, instruction is also provided by certified teachers who receive extra compensation.

During 1971, approximately 190,680 Illinois pupils completed the classroom instruction while about 177,830 finished the practice driving phase. The total cost of driver education in the state is estimated to be in excess of $15-million. Payrolls are the largest single expenditure.

In districts surveyed, reported costs ranged from a low of $10.44 to a high of $50.93 per pupil for classroom instruction. Practice driving costs varied from a low of $38.81 to a high of $164.54 per pupil. The survey indicated an average statewide cost of $17.89 for classroom instruction, $66.86 for practice driving instruction, and $84.75 per pupil for the total program. The primary reason for the cost difference between classroom and practice driving is the one teacher/one student ratio in driving.

The majority of districts use automobiles loaned by local dealers. The schools pay for gasoline, oil, insurance, and other operating expenses. When the automobiles are returned to the dealers, a nominal conditioning fee is charged which includes the changeover from dual controls. A small number of schools are required to lease cars because area dealers do not provide loaned vehicles. One large district uses teams of instructors and mobile simulators which move from school to school. This eliminates the need for manpower and facilities at every school.

EVALUATION

Driver education instructional costs amount to approximately 88% of classroom work costs and 94% of practice driving costs and appear excessive. This is particularly apparent in the driving area where various alternatives for reducing instruction costs are considered. Districts using simulators, driving ranges, and/or conducting driving practice during nonschool hours have lower costs. However, these methods are far from prevalent in Illinois student driver education activities.

The use of paraprofessionals to reduce practice driving costs is viewed by a number of school officials as having merit. Present state regulations preclude utilization of such personnel and no study has been made to evaluate the benefits of reversing them.

Most schools have been successful in arranging for donated vehicles. Those districts not using them were either unaware of the possibility or were unsuccessful in soliciting aid from local dealers. As a result, they are incurring unnecessary expenses. Vehicle operating costs are somewhat similar to expenses incurred for supplies in vocational and laboratory courses. Fees to recover such costs are not typically charged.

RECOMMENDATIONS

1. Structure a practice driving program which includes maximum use of simulators and specifies behind-the-wheel driving be conducted during periods other than normal school hours.

A tremendously high instruction cost results from the one-to-one pupil/instructor ratio in the behind-the-wheel phase of driver education. During the 1970-1971 school year, instructors' salaries for practice driving amounted to an estimated $11.2-million or 73% of the total driver education expense. Therefore, simulators should be used in all courses as a means of reducing individual instruction time. The following illustrates the effectiveness of this approach:

- A 12-unit simulator can reduce the operating cost of an hour of behind-the-wheel highway driving by 66%.
- A 16-unit simulator can lower the costs by 75% and a 24-unit simulator can reduce it by 83%.

Use of simulators will not eliminate all practice driving. A minimum of three hours highway experience will still be required.

Most practice driving instructors are paid on the basis of experience, number of degrees, and their expertise in fields other than driver education. Based on information obtained in the study, a substantial saving can be achieved by conducting highway driving in periods other than normal school hours and paying teachers a supplemental income at rates comparable to those for substitute teaching.

Cooperative regional or county simulator programs will be required to equip smaller school districts. Mobile units should be used to eliminate the need for permanent facilities. At present, 42,420 pupils are taught under the proposed program at a cost of $48.75 per pupil for practice driving. The average instruction cost for the remaining 135,410 pupils is $71.50 per student or a difference of $22.75. Assuming it is possible for all pupils to be taught at the lower rate, an estimated annual saving of $3.08-million would be realized.

Based on survey data, implementation would require an additional 840,000 hours of simulator time. The one-time cost for equipment will be approximately $2.4-million. Of this, $1.2-million will be paid by the districts and $1.2-million from federal funds.

2. Charge driver education pupils a nominal fee to recover vehicle operating costs.

Expenses for gasoline, oil, vehicle maintenance, insurance, and other operating costs represent substantial expenditures for the driver education program each year. These purchases are similar to those made for laboratory courses such as chemistry or biology. Most schools charge laboratory fees for such courses to recover their expenditures. However, none of the districts studied charge a similar fee for their driver education program.

To recover operating costs, a nominal charge of $6 should be made to each driver education pupil annually. Fees should be revised each year based on budgeted vehicle operating costs. At current enrollment levels, implementation will provide an annual income of approximately $1.07-million to offset current expenditures.

3. Promote the use of loaned vehicles for driver education.

Loaned vehicles, which represent a substantial saving to the driver education program, are not available to all districts. During the 1970-1971 school year, two districts included in the study incurred an estimated expense of $52,800 for leased and owned cars used in driver training. More than 70 other high school and unit districts surveyed had cars on loan from dealers at little or no expense.

All districts should use vehicles furnished by manufacturers. When such arrangements cannot be made locally, the Educational Service Region or the Office of the Superintendent of Public Instruction should provide assistance.

It is not known how many districts in the state now purchase or lease vehicles. However, if the two districts included in the study adopt this recommendation, the annual saving will be $53,000.

Insurance

School districts are, for the most part, carrying essential coverages such as fire, extended coverage, and vandalism insurance for buildings and contents; public liability insurance for permises, operations, and vehicles; workmen's compensation, boiler, machinery insurance, and fidelity bonds; and group hospital, major medical, and life insurance.

Within the foregoing, many differences exist due to the absence or presence of coverage for extra expense, valuable records, all-risk data processing insurance, floaters on scheduled property taken off premises, and policy forms. Further variations in public liability insurance involving the extension of coverage for personal injury, civil rights, malpractice for nurses and doctors, and lunchroom products liability were noted.

In the area of vehicle coverage, all districts carry public liability insurance, but considerable deviation was found in physical damage insurance ranging from full coverage through a variety of deductibles. It was common to find medical payments and uninsured motorist's insurance and provisions protecting the district on hired cars.

The insurance program in many districts is handled by the business manager. Otherwise, it is managed by the superintendent. Often, several agents in the district write the coverage with no single agent responsible for the overall program. A few districts hire independent insurance consultants. The board makes the final decision on types and amounts of insurance.

In many districts, the business manager and the board prepare specifications and attempt to secure bids on the program from various carriers. In others, local insurance agents appoint one to procure bids. When written, the local agents are assigned a portion of the commission by the lead agent.

Most districts have coinsurance clauses in their fire and physical damage policies. Valuations of district properties are made by school superintendents, business managers, insurance agents, insurance companies, and professional appraisal firms. Generally, fire and extended coverage is provided on a repair and replace basis, rather than on actual cash value. Deductibles of $10,000 per occurrence were not unusual. Fire prevention and safety advice is, sometimes, provided by loss prevention engineers of the carriers.

Presently, not many districts are having trouble securing insurance. Only one was found using the Fair Access to Insurance Requirements (FAIR) Plan. FAIR provides insurance availability to public schools in Illinois. The maximum limit afforded is $500,000 per location. This is inadequate because most districts requiring these services are located in metropolitan areas and contain insurable values far in excess of obtainable limits.

Most school districts pay a portion of the cost for employee hospitalization-major medical programs but have the employee pay for dependents. Likewise, group term insurance is often part of the employee benefits package.

Values of property covered, in terms of replacement costs of buildings and contents, amounted to $4.25-billion. Total annual insurance premium costs throughout the state were in excess of $40-million during 1970-1971. Approximately 69% or $27.5-million were for group health, major medical, and group life including some $11.7-million for the Chicago school system. The remaining 31% went for property and casualty insurance premiums. Chicago's group insurance premiums are estimated at $16-million for 1972, a 37% increase.

EVALUATION

A few districts have well-rounded insurance programs on modern package plans with policies in order as to common terms and endorsements. Most, however, fail on one or more of these points and thus are over-insured, underinsured or have duplicate coverages. They would welcome help on insurance matters, such as writing coverage specifications, listings, valuation of buildings, and contents for replacement costs. Also, advice is needed on the use of deductibles, modern package plans, keeping tabulations on losses sustained, and knowledge of reserves maintained by insurance companies for losses.

Although most districts feel they carry high public liability limits for premises, operations, and vehicles, there is little uniformity. Nearly 50% do not have an umbrella liability policy for excess losses.

Many districts purchase a variety of incidental coverages such as burglary and theft as well as property floaters for band instruments, uniforms, audio-visual equipment, office equipment, and the like. Several of these areas are subject to a high incident of small losses but present little possibility of a major loss not covered by basic policies.

Few districts review or study fire prevention and rate analysis services prior to letting construction contracts. Such an analysis, when building a new school or an addition, will produce the lowest possible fire insurance rate. This is important since premium costs will be reduced over the lifetime of the building.

Those districts not using professional or insurance company appraisers to determine coverage values may find lack of acceptance of these values at time of loss and suffer a coinsurance penalty. Only a few have complete insurance policy registers, or schedules, which indicate pertinent information such as amounts of insurance, agent's names, insurance company names, premiums, expiration dates, and claims.

RECOMMENDATIONS

1. Have the Risk Manager of the Department of Finance establish guidelines for purchasing insurance which could be adapted to the needs of various school districts and utilize larger deductibles, self-insurance, and noninsurance.

Generally, school districts lack sufficient knowledge to specify and purchase insurance coverage. This leads to a variety of programs and results in insufficient protection against potential property and liability losses. Uniform specifications are necessary for making decisions on what to insure for evaluation of alternatives and as a means of communications. Guidelines could be developed by the Risk Manager at minimal cost to assist school districts in developing good insurance specifications. They should be accompanied by an explanation of insurance to make them understandable. Resulting specifications should outline alternatives and require the premium for each item to be identified in the quotation. These guidelines should detail:

- Fire and extended coverage on buildings and contents versus all-risk insurance.
- Utilization of replacement cost rather than actual cash value as a basis of property and contents valuations.
- Applicability of special multi-peril forms with public and institutional property endorsements.
- Advantages of loss deductibles and methods of determining their appropriate size.
- Benefits of negotiating for insurance coverage rather than using competitive bids.
- Illustrations of situations which dictate the use of umbrella liability insurance on premises, vehicles, doctors, nurses, products liability for lunchrooms, and the like.
- Examples of the uses of agreed-amount endorsements to negate potential losses from coinsurance penalties.

Even though it is often within the financial ability of a school district to absorb noninsured capital loss, use of large deductibles for saving on premiums is seldom utilized. In several cases, they do not want to expose the general fund to the uncertainty of losses. Therefore, school districts should be encouraged to purchase insurance with substantial deductibles for coverage in major losses of buildings. Routine maintenance-type losses such as glass, and the fringe area items having a small, single loss probability, should not be insured.

Savings would result from premium reductions due to larger deductibles and elimination of policies on musical instruments, office equipment, and other items where minor losses represent no financial hardships. For each 1% of property insurance premium reduction achieved through the use of larger deductibles, statewide saving of $55,000 should result. Thus, a reduction of 10% would ensure annual savings in premiums of $550,000.

2. Eliminate the danger of coinsurance penalties on fire and windstorm losses by having the carrier issue an agreed-valuation endorsement.

In many fire policies, the valuation of the buildings and contents is estimated by one of the school officials or the agent. If such estimates are undervalued on the day of a fire or windstorm loss, the insured will not collect the full loss and will suffer a coinsurance penalty. If, however, the estimate was prepared by and agreed to by the insurance company, no coinsurance penalty would be applied.

Each superintendent should review present policies to determine that they include an agreed-valuation endorsement. If an endorsement does not exist, steps should be taken to obtain one.

3. Incorporate insurance industry requirements into specifications for school facilities planning.

Generally, schools are being built without adequate consideration of insurance industry fire safety standards. Typically, such standards consider facility location in relation to fire departments, water supplies, and gas mains; flooding potential; use of fire retardant materials; and alarm systems. Installation of sprinkler systems, fire extinguishers, and fire doors is now required by the Life-Safety Code.

As a result, construction of facilities without regard for protection incur higher insurance premiums. The difference in fire insurance rates may be between 100% to 200%, depending on location and construction of facilities when standards are not followed.

The statewide facilities planning group and the statewide building plans review agency, recommended elsewhere in this report, should incorporate services of the Illinois Office of the Insurance Service Organization (ISO) in developing standards for application to facility planning and building construction. Savings in insurance premiums will be realized annually throughout the life of the building. One-time costs, at time of construction, cannot be estimated.

4. Review security and property protection in school systems.

Many schools have experienced losses from burglary, theft, vandalism, and fire which could be minimized or avoided if proper security measures or systems were maintained. Therefore, the districts should review their security and property protection measures and update them to prevent many small losses. This would have a favorable effect on insurance. Decreased loss payments would be reflected in lower future rates and the cost of noninsured losses would be reduced. Automatic sprinkler systems, alarm systems, watchmen and other security measures, depending on their applicability, can produce immediate rate credits.

Insurance reductions of up to 70%, granted for installation of approved automatic sprinklers, will often pay for the cost of installation within five years. Meanwhile, safety is enhanced.

5. Do not purchase collision insurance on school-owned buses and automobiles where the number of units is sufficient to assure a reasonable spread of risk.

Several districts with many buses have insured their fleet for collision damage at a substantial premium. The probability of collision losses in excess of the deductible can be insignificant when compared to the premium paid. Those with fleets in excess of 10 vehicles should review their past loss history and consider self-insurance against collision damage.

Vehicle insurance premiums for all Illinois school districts outside Chicago are estimated at $1.3-million annually. Of this, about 20% represents collision premiums and about one-half of that represents fleets in the 10 vehicle or over class. If this suggestion is implemented by all qualifying districts, a saving of $130,000 per year in premiums would result.

6. Stop the purchase of fire, theft, and glass breakage coverage on school-owned buses where the number of units is sufficient to assure a reasonable spread of risk.

Many districts with sizable fleets have insured their buses for fire, theft, and glass breakage. Usually, the probability of loss from these perils is minor unless the fleet is housed in one location. Individual districts should review these coverages if their bus fleets are not maintained in one location and consider dropping this insurance. By eliminating this coverage, annual savings of $130,000 will be realized.

7. Establish a safety committee at each school site to make regular inspections.

One of the best ways to reduce insurance costs is to eliminate claims. The business community has recognized the value of safety committees for years, but few districts are utilizing this tool. Recently, the federal government enacted the Occupational Health and Safety Act which imposes fines for violations of federal safety standards. Public schools are exempt from this act, but should follow it.

Most districts rely upon the engineering staffs of insurance carriers for suggestions relating to safety. These visits are infrequent and cannot take the place of a locally administered safety program. Hazardous conditions should be corrected immediately. A committee should be responsible for seeing that trash does not accumulate, water is mopped up on inclement days, broken glass is removed, and other safety hazards are corrected.

Committee membership, consisting of a building engineer, a custodian, an employee of the business office, a teacher, a student, and a member of the local fire department could be rotated frequently to increase the awareness of safety. Meetings would be held at least monthly and recommendations on safety would be prepared and referred to the local principal with a copy to the district superintendent.

8. Review leases and other agreements to determine whether insurance obligations and responsibility for loss are adequately covered.

Most school districts enter into leases or agreements for the use of property such as driver training vehicles, data processing equipment and do not carry all-risk property insurance. It is not unusual for a lease to impose responsibility for loss from any cause whatsoever. The local board attorney or business manager should review existing lease arrangements to ensure that the property is adequately protected.

9. Maintain an insurance schedule and filing system for policies, correspondence, and claim records in each district using guidelines set by the Risk Manager.

Many districts in the survey had little knowledge of their insurance program and, in some cases, could not find their present insurance policies. This lack of control could lead to uninsured losses and duplications of insurance.

It is good business practice to prepare a schedule of insurance and exercise proper control over policies, claim records, and other documents. The Risk Manager has established guidelines regarding such schedules and controls. While no direct savings are contemplated, it should provide school districts with better control over their insurance program.

10. Establish a fund or pool to insure elementary and secondary public schools, administered by the Risk Manager.

Each district purchases a variety of expensive insurance coverages. With escalating premium costs, alternative methods of providing coverage need to be investigated.

Other states have installed an insurance pool or fund to provide various coverages for local districts. After reviewing the strengths and weaknesses of these programs, the Risk Manager should establish a state insurance pool to provide basic insurance coverage for Illinois school districts. The initial coverage offered should be broad property insurance for building and contents. Others including workmen's compensation, liability, vehicle, and surety bonds should be made available to the district as soon as the pool is operating satisfactorily.

The Risk Manager should recommend alternative methods of protecting the state from large annual losses which could be created if claims exceed premiums. Adequate protection could be provided through reinsurance and the ability to issue bonds to cover losses. In addition, he should be given authority to invest premium deposits and, pending claim reserves in interest bearing securities, to reduce annual premium costs to the districts. Additionally, credits should be issued each year to participating school districts to distribute premiums beyond their current needs.

As new insurance coverages are made available, the Risk Manager should specify the types and characteristics of these coverages. These specifications would indicate the amount of deductible, equitable rates, risk to be assumed by the pool, type and dollar amount of coverage, amount of reinsurance, as well as recommended loss prevention equipment and programs.

Districts should be encouraged to self-insure the first dollar coverage. However, they may choose to purchase this from local agents or brokers.

If this pool were implemented, it is estimated that the annual insurance premium would be reduced by 30% or about $3.36-million. The program could be administered by the risk management group with staff increases costing no more than $110,000 per year.

Health Services

To encourage proper health practices, the Illinois School Code requires physical examinations for all children upon entry into kindergarten, first, fifth, and ninth grades. The code also provides that the Department of Public Health, through designated agencies, may accomplish examinations of those children who cannot otherwise be examined. In addition, every child, prior to entering kindergarten or first grade, must be immunized against measles, smallpox, tetanus, diphtheria, poliomyelitis, and pertusis.

District health care services within the state vary dramatically. In 50% of the districts surveyed, county boards of health provide part or all of the health care services. Boards of education take responsibility for health services in 40% of the districts. The remaining 10% offer no services.

Several types of health services are available. Physicians and dentists may be utilized on a full- or part-time basis as part of a volunteer program, through a clinic or under a per-diem fee arrangement. In many cases, the only service used is that of the city or county health officer, which often is rendered on an emergency or epidemic basis only.

School nurses within the districts are either registered or certified public school nurses. Registered nurses can only give treatment under the direction of a physician. In the state's school districts, approximately 80% of the nurses are registered rather than certified.

A certified public school nurse has greater latitude, but obtains a virtually unbreakable tenure of office after three years. Additionally, the nurses who have teaching certificates are compensated on the teachers' wage scale which may be 25% to 30% higher than that for registered nurses. For the most part, school nurses perform routine medical functions, maintain health records, and do a minor amount of individual health counseling.

In complying with state requirements for physical examinations and immunizations, school districts usually rely on local physicians and public health organizations to provide needed services. In low income metropolitan areas, the school districts have assumed the examination and immunization responsibility. The Chicago school system has been a leader in providing this service through federal programs and local board funds.

Another function performed in many school districts is that of providing hearing and vision screening tests to ensure early identification of student deficiencies. In some districts, tests for other major disorders are also provided.

The Office of the Superintendent of Public Instruction has recently issued some goals for health services throughout the state. One of these relates to the provision of a certified school nurse for each 1,000 children in Illinois. The office has sought legislation to make this a mandatory requirement in the school systems. The current ratio is approximately one nurse for each 1,200 students.

In association with this recommendation, OSPI has recommended functional guidelines for certified school nurses as well as guidelines related to the administration of medicine in public schools. These specify that school nurses can administer medicine to a child in an emergency, but not provide treatments so that a child may remain in daily attendance.

Health services in the school systems vary widely. Needs differ depending on the size, economic composition, and resources of the local community. In addition, the methods used to meet district health care needs show no consistent pattern.

Statewide expenditures as reported to OSPI for health services, excluding Chicago, total approximately $20-million, or about $10 per pupil during fiscal 1971.

EVALUATION

Due to the variety of health services provided in the school districts and the lack of consistent statistical data to evaluate their effectiveness, meaningful cost comparisons are difficult. It would appear, however, that some districts have not effectively utilized local health agencies.

As a result, they are spending substantially more on health services than cities of similar size and demographic composition. In one instance, there was a difference of $10 per student in expenditures for health services in two neighboring school districts. Many similar disparities were noted during the survey.

RECOMMENDATIONS

1. Employ regular graduate registered nurses.

Many districts employ certified teacher/registered nurses at a salary level approximately 25% to 30% higher than graduate registered nurses. After three years, these teacher/registered nurses have tenure and can technically be shifted to teaching assignments. However, most nurses have no instructional responsibilities or duties.

Therefore, registered nurses could be employed at a lower salary rate. In those districts where needs are limited, they could be hired on an hourly basis. If registered nurses were used throughout the state, an annual saving of almost $1.6-million would be realized by the districts.

2. Utilize public health facilities for school health programs.

About 72% of the school districts in Illinois provide some type of health service for students. The others utilize local public health agencies at little or no expense to the district. The Illinois School Code provides that the Department of Public Health may provide such services.

If 25% of the programs currently funded by school districts were provided by local or county health agencies, approximately $4.6-million would be saved annually. Some or all of the costs would be transferred to these agencies.

3. Avoid using nursing personnel for routine functions which can be performed by other employees.

Many districts utilize school nurses for routine clerical and filing functions. Others use nurses for vision and hearing tests which do not require the services of professional personnel.

Such clerical and testing functions can be performed by nonprofessional personnel with a minimum of training. In many instances, the services could be performed without charge by volunteers from the PTA or other organizations. Nurses will have increased time to perform professional duties through implementation of this proposal. Savings to be realized by the school districts will depend upon their individual health organization.

Attendance Services

Every child between the ages of seven and 16 years must attend school during the regular term. Exceptions specified in the Illinois School Code include undesirable students and those lawfully employed with the permission of the district's superintendent or the governing school board. Attendance may be in a public, parochial or private school which meets the minimum requirements specified in the code.

Attendance services in the state vary substantially between school districts. Generally, districts are responsible for enrolling eligible students, monitoring and reporting attendance, and enforcing the state code as it relates to compulsory attendance.

Each fall, the school districts file student enrollment data with the Superintendent of Public Instruction. In some districts, enrollment figures are obtained through a door-to-door canvass of residents. Most district superintendents rely on kindergarten enrollments and in-school statistics to identify the student population. Door-to-door canvasses are not required by law. In those districts using the canvass approach, many methods are utilized. These range from using school district employees to PTA members.

In Illinois, the state's grant to a district is based in part on its average daily attendance figures (ADA). Thus, the ADA and the average daily enrollment (ADE) are reported to the Office of the Superintendent of Public Instruction each month. The highest six month's ADA during the school year is used to determine the district's reimbursement for the following year. As a result, school districts spend substantial amounts of time and money on the maintenance and reporting of average daily attendance figures.

Several districts utilize their own data processing equipment or a service bureau to assist in the attendance maintenance function. A total of approximately 29% of the districts surveyed indicated the use of data processing equipment for this activity.

The Illinois School Code requires each Educational Service Region superintendent to appoint and compensate a county truant officer. In addition, many school districts employ one or more officers to follow up on the more severe cases of nonattendance.

About 57% of the school districts surveyed use county truant officers while the remainder hire attendance personnel. Follow-up procedures vary extensively. Some districts require the school principal, superintendent or guidance counselor to contact parents when students miss school. Others utilize the district or county attendance officer for this purpose. Most districts which employ full-time truant officers are located in the metropolitan areas where attendance problems are more prevalent and the county officer has not been able to meet the demands in these areas.

Statewide school costs for attendance services in fiscal 1971 were reported as $4.1-million to the Office of the Superintendent of Public Instruction for an average cost of about $1.96 per student. However, these amounts are understated since existing accounting systems do not allocate salary expenditures to the attendance function for part-time work of school personnel. Consequently, accurate per-pupil attendance costs cannot be determined or even esimated. Expenditures ranged from zero to $11.06 per pupil in the schools surveyed by the study's task force.

EVALUATION

Once a child is enrolled, the school districts do a reasonably good job of recording his attendance and following up on improper absences, truancy, dropouts, and transfers.

In the large districts, where truancy may be a more significant problem, responsibility for intensive follow up is assumed by teachers, principals, deans, counselors, and attendance officers. In many districts, this follow up has become very costly.

The state has enacted rigid legislation on school attendance as well as complicated and extensive reporting rules in regard to average daily attendance. This has forced local school systems to devise extensive reporting systems to comply with these requirements. As a result, too much time and money is spent by school systems in monitoring attendance and computing monthly ADA statistics.

RECOMMENDATIONS

1. Revise the recordkeeping and reporting requirements for calculating average daily attendance.

Each school district reports the average daily attendance (ADA) to the Office of the Superintendent of Public Instruction (OSPI) monthly. The ADA is one of the factors utilized to determine the amount of the district's grant. This system requires each school to maintain meticulous daily attendance records. Hence, many of them spend inordinate amounts of time and money compiling and reporting these statistics to OSPI.

The computation method requirement should be revised to reduce the amount of detailed recordkeeping required at the school level. Actual attendance should be recorded and reported to OSPI no more than 15 times each school year. The reporting dates should be selected at random by OSPI to provide an equitable basis for distributing state aid.

Implementation will simplify the recordkeeping and statistics compilation function currently carried out by the schools. Daily attendance will still be monitored for truancy purposes, but monthly reports of average daily attendance will not be required. This will provide additional time for teachers and administrators to spend in educating children. Implementation will also result in an annual saving of approximately $8.21-million through the elimination of the equivalent of one clerk in each district.

2. Utilize data processing equipment to process attendance records.

Many districts have not used available data processing equipment to simplify record maintenance for school attendance. In other districts, such facilities are utilized and have apparently been of great assistance.

Where possible, the Office of the Superintendent of Public Instruction should provide aid to those districts which could utilize this type of data processing capability by helping them locate appropriate programs and service bureaus. It is difficult to quantify the annual saving resulting from implementation.

3. Eliminate annual door-to-door census taking to provide enrollment figures.

A number of districts make an annual canvass to identify children who should be in school. Many of the district superintendents surveyed felt this function was unnecessary and should be eliminated. The Illinois School Code does not require a door-to-door census to establish enrollment levels.

The necessary enumeration can be accomplished by using in-school figures and other data from public, parochial, and private schools. This will save the expense of census taking and eliminate the clerical work of checking reports against enrollment records for verification. Annual savings cannot be quantified since current costs are not available.

4. Eliminate attendance officers employed in all school districts where possible.

The law provides that superintendents of Educational Service Regions shall appoint a county truant officer to enforce state attendance laws. While many school systems utilize such services exclusively, others have hired their own attendance officers. Where possible, the districts should rely on county officers to follow up on difficult truancy problems.

Section II
Digest of Statewide Recommendations

Governor's Commission on Schools
Business Management Task Force

Digest of Recommendations

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
Administration			
1. Reorganize the administrative functions of the Office of the Superintendent of Public Instruction to fix responsibility and accountability for business management.	Legislative		
2. Consolidate districts with an average daily attendance of 1,000 students or less.	Legislative	Annual Saving	$6.4-million
3. Accelerate the reduction of Superintendents of Educational Service Regions to 12 by the end of 1973; make the position appointive by the State Superintendent of Education with approval of the State Board of Education; and define the services to be rendered, establishing appropriate selection criteria.	Legislative	Annual Saving	$4.1-million
4. Create an independent legal entity to replace existing cooperative districts.	Legislative		
5. Develop and publish a study of the costs associated with the implementation of its *Action Goals for the Seventies.*	Administrative-State		
6. Require the Auditor General to conduct an annual management procedural audit of the school system.	Legislative		
7. Strengthen the OSPI internal audit function by employing a professional staff qualified in accounting, systems and procedures, and business management.	Administrative-State		
8. Develop uniform auditing and financial reporting requirements within OSPI for annual school district audits.	Administrative-State		
9. Have attendance and claim reimbursement audit work performed by independent public accounting firms.	Administrative-State	Annual Saving Annual Cost	$723,000 $361,000
10. Initiate a statewide records management program.	Administrative-State		
11. Adopt a planned program of orientation and training to improve the performance of local school board members.	Administrative-Local		
12. Eliminate the requirement for annual publication of local district expenditures in newspapers.	Legislative	Annual Saving	$1.14-million

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
Money Management			
1. Create a pooled cash and pooled investment fund to provide for immediate use of the principal sources of school system income such as federal and state aid and property tax collections, and to optimize the earning power of idle assets tied up in local district bank accounts and small investments.	Legislative	Annual Income	$38.43-million
2. Issue lower cost general obligation state bonds in lieu of local district special revenue bonds to finance local capital improvements.	Legislative	Annual Saving	$4.1-million
3. Discontinue the issuance of local tax anticipation warrants and replace them with state-issued short-term general obligation notes.	Legislative	Annual Saving	$5.67-million
4. Discontinue the legal authorization for the issuance of teachers' orders.	Legislative	Annual Saving	$207,000
5. Change the payment plan for local property taxes to a pay-as-you-go basis, with one-twelfth of the tax due on the 15th day of each calendar month beginning with January 15.	Legislative	Annual Income One-Time Income	$5.58-million $490-million
6. Pay the local school districts their portion of all penalties collected for late payment of real estate and personal property taxes levied by them.	Legislative	Annual Income	$3.08-million
7. Increase the penalty for late payment of real estate and personal property taxes to 2%.	Legislative	Annual Income	$3.08-million
8. Eliminate the practice of placing in escrow those taxes which are paid under protest.	Legislative	Annual Income	$3.6-million
Federal-State Aid Programs			
1. Eliminate the practice of recomputing general state aid and adjusting payments to local districts.	Legislative		
2. Provide expanded state-level facilities to assist the local districts in federal program participation.	Administrative-State		
3. Urge review and appraisal of federal programs now on a reimbursement basis to determine if they would be more effective and used more widely if changed to grant type aid.	Administrative-State		
4. Accelerate aid payments under state programs in order to provide funds for local districts on a pay-as-you-go basis.	Legislative		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
Systems and Procedures			
1. Establish a state-level Systems and Procedures Department to develop systems guidelines, office practices, and equipment standards for the districts.	Administrative-State	Annual Saving	$1.4-million
2. Conduct a statewide review of telephone costs.	Administrative-State	Annual Saving One-Time Cost	$540,000 $50,000
Data Processing			
1. Establish a data processing network under the Department of Finance to serve all districts in the state.	Legislative	Annual Saving One-Time Cost	$5.1-million $4.5-million
2. Restrict further purchase, lease or rental of additional computer equipment by the local districts.	Legislative	One-Time Saving	$500,000
3. Require complete and standardized documentation of computer programs.	Administrative-State		
4. Establish a users' group for all districts with computer facilities.	Administrative-State	Annual Cost	$200,000
5. Submit state reports from districts with data processing equipment in computer-usable form.	Administrative-State	Annual Saving	$100,000
6. Issue guidelines to computer installations covering file retention, back-up procedures, off-premise storage, and recovery procedures.	Administrative-State	One-Time Cost	$200,000
Accounting, Auditing, and Financial Controls			
1. Proceed upon a coordinated and statewide accounting improvement program to be implemented on an accelerated basis.	Legislative		
2. Reassign all school accounting functions to the school district.	Legislative		
3. Define the financial management function for statewide district use.	Administrative-State		
4. Amend legal requirements that school boards approve all contracts in excess of $2,500 and change school board practices whereby all accounts payable listings must have school board approval prior to disbursement.	Legislative		
5. Revise accounts payable procedures to take all available cash discounts on purchased items.	Administrative-Local	Annual Saving	$1.05-million

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
6. Develop uniform and prescribed capital asset financial justification and reporting procedures.	Administrative-State		
7. Prepare long-range financial forecasts of public school expenditures.	Administrative-State		

Personnel

1. Conduct contract negotiations on a regional basis.	Legislative		
2. Provide competent, experienced individuals to conduct negotiations with local collective bargaining units.	Administrative-State		
3. Negotiate employee contract agreements to be effective for not less than two years.	Legislative		
4. Exclude from coverage, under collective bargaining agreements, administrative employees who have the authority to responsibly direct or make effective recommendations concerning practices of hiring, scheduling, assignment or promotion of personnel.	Legislative		
5. Prohibit school board members affiliated with the same local, state, national or international organization with which a school board is negotiating from participating in such negotiations and in voting on accepting the agreement.	Legislative		
6. Explore the possibility of future implementation of differentiated staffing in Illinois schools.	Administrative-Local		
7. Consider alternatives developed by some districts for deemphasizing automatic salary increases given in traditional step and lane plans.	Administrative-Local		
8. Develop or revise, where necessary, and utilize job descriptions for nonteaching positions.	Administrative-Local		
9. Establish competitive salary ranges and merit pay plans for administrative and clerical positions.	Administrative-State	Annual Saving	$4.6-million
10. Implement appropriate employment procedures for hiring new personnel.	Administrative-Local		
11. Establish a state charter for district school business managers.	Legislative		
12. Adopt a merit employment system for OSPI.	Administrative-State		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
13. Adopt a pay-as-you-go method for funding employer contributions to the teacher retirement plans.	Legislative	Annual Saving	$33.7-million
14. Adopt investment policies currently followed by a majority of private pension and retirement funds.	Legislative	Annual Saving	$22.8-million
15. Provide a statewide single policy for health and accident, major medical, and group life programs.	Legislative	Annual Saving	$2.75-million
16. Increase employee's participation in premium cost of health care insurance where districts pay more than 50% of the cost by having the district's employees absorb part or all of future increases in premiums.	Administrative-Local		
17. Offer group life insurance to employees in significant amounts in line with their duties, responsibilities, length of service, and compensation.	Administrative-Local		
18. Initiate a Communication of Benefits Program.	Administrative-Local		

Public Relations

1. Establish and implement a management plan of action for effective public relations in the districts.	Administrative-Local		
2. Assign responsibility and accountability for district public relations to a specific individual.	Administrative-Local		
3. Provide local districts with public relations counsel from OSPI.	Administrative-State		
4. Have OSPI analyze the effect of pending legislation and communicate recommendations to the district for possible dissemination to local communities.	Administrative-State		

Purchasing and Warehousing

1. Initiate a four-part program to improve the collective buying power of Illinois schools.	Legislative	Annual Saving	$12.6-million
2. Create a state-level staff purchasing function.	Legislative	Annual Cost	$550,000
3. Expand the use of cooperative buying and warehousing activities among the local districts.	Legislative		
4. Use staff support to promote the use of systems contracting, blanket order, stockless purchasing, and the like for low dollar volume items.	Legislative		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
5. Expand the use of state-negotiated purchasing contracts.	Legislative		
6. Eliminate the requirement for advertising formal bids.	Legislative	Annual Saving	$96,000
7. Centralize purchasing for bus transportation services and driver education.	Administrative-State	Annual Saving	$850,000
8. Install inventory management systems in all central warehouses.	Administrative-Local		
9. Obtain competitive bids on intradistrict delivery service.	Administrative-Local		
10. Adopt a combined purchase order form.	Administrative-State	Annual Saving	$90,000

School Food Service Programs

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Establish effective management and cost control reporting.	Administrative-State	Annual Saving	$935,000
2. Centralize kitchen operations wherever possible.	Administrative-Local	Annual Saving One-Time Cost	$7.6-million $500,000
3. Establish job descriptions for all food service personnel.	Administrative-Local		
4. Increase the use of student help in food service programs.	Administrative-Local	Annual Saving	$1.4-million
5. Expedite implementation of government surplus commodity processing agreements.	Administrative-State	Annual Saving	$2.6-million
6. Centralize food purchasing procedures.	Administrative-Local		
7. Design a standard procedure for cash handling at the state level.	Administrative-State		
8. Implement extensive use of products such as synthetic meat substitutes.	Administrative-State	Annual Saving	$2.7-million
9. Increase district use of government surplus commodities.	Administrative-State		

Textbooks

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Publish lists of discontinued textbooks that are in good condition.	Administrative-State	Annual Saving	$390,000
2. Increase the use of paperback textbooks.	Local Board	Annual Saving	$57,000
3. Establish a uniform inventory control system through OSPI for the distribution and accountability of textbooks.	Administrative-State		
4. Discontinue the current practice of rebinding textbooks.	Administrative-Local	Annual Saving	$190,000

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
5. Establish a separate account number for teacher and administrative salaries paid for time spent on the textbook adoption process.	Administrative-State	Annual Saving	$570,000
6. Establish use and verification of charges on bills of lading and postage rates for educational materials.	Administrative-Local		
Library Books			
1. Centralize control of Educational Media Centers (EMC) under single supervision within each district.	Administrative-Local		
2. Consolidate book and audio-visual budgets within each district and work toward cooperative purchasing to negotiate additional discounts.	Administrative-Local	Annual Saving	$505,000
3. Analyze the work performed in libraries and structure assignments to remove routine responsibilities from the professional's duties.	Administrative-Local		
4. Use purchased book processing rather than self-processing in the school district.	Administrative-Local	Annual Saving	$325,000
5. Design traffic control systems in libraries to reduce pilferage.	Administrative-Local	Annual Saving One-Time Cost	$975,000 $6.3-million
Building Operation and Maintenance			
1. Establish a management services group to provide local school districts with guidelines, information, and consulting assistance services in facilities, operations, and maintenance.	Administrative-State	Annual Saving	$2.21-million
2. Establish supervisory positions for the building operations and maintenance function at the school district level where feasible.	Administrative-Local	Annual Saving	$10.91-million
3. Restructure school district procurement practices and systems and establish procurement personnel positions in the larger districts.	Administrative-Local		
4. Analyze and audit electric power, water, and natural gas utility bills and contracts periodically to determine proper rate applications and billings.	Administrative-Local	Annual Saving One-Time Cost	$1.38-million $685,000
5. Share school facilities and grounds with other institutions and government bodies to reduce maintenance costs.	Local Board		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
Facilities Planning and Space Utilization			
1. Develop realistic facilities planning guidelines, standards, and information for use by local districts.	Legislative	Annual Saving	$11.3-million
2. Use a systems approach for the design and construction of new facilities.	Legislative	Annual Saving	$6.4-million
3. Require school districts to submit building plans to a state agency for a thorough review prior to the letting of construction contracts.	Legislative	Annual Saving	$4.5-million
4. Collect information concerning residential developments.	Administative-Local		
5. Obtain a legal opinion as to the order of precedence for various state and local building codes.	Administrative-State		
6. Study the year-round school program concept as an alternative to the construction of new facilities.	Administrative-Local		
School Construction			
1. Select the architect based upon his expertise in school building design.	Administrative-Local		
2. Utilize the system design concept.	Administrative-State		
3. Remove the procurement and installation of building equipment from the architect agreement and building contract.	Administrative-Local	Annual Saving	$500,000
4. Install air conditioning or make provisions for future systems in new construction.	Administrative-State		
5. Reassign administration of the School Life-Safety Code from OSPI and the ESR to a separate agency.	Legislative		
Pupil Transportation			
1. Expand the use of owned or leased transportation fleets.	Legislative	Annual Saving	$4.8-million
2. Amend the statutory law to allow drivers under 21 years of age to operate transportation vehicles.	Legislative	Annual Saving	$4.4-million
3. Charge fees for extracurricular transportation and for transporting students living less than 1.5 miles from their attendance centers.	Legislative	Annual Income	$6.2-million
4. Transfer responsibility for business aspects of pupil transportation to the Department of General Services.	Legislative		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
Bus Fleet Management			
1. Establish large cooperative bus fleets and centralized maintenance shops owned by participating districts.	Legislative	Annual Saving One-Time Saving	$3.05-million $3.74-million
2. Create a flat rate reimbursement formula to encourage efficient and economical bus fleet management.	Legislative		
3. Institute a bus fleet maintenance and cost reporting system.	Administrative-Local		
4. Use student mechanics for bus maintenance in cooperation with the vocational education program.	Local Board	Annual Saving	$375,000
Pupil Driver Education			
1. Structure a practice driving program which includes maximum use of simulators and specifies behind-the-wheel driving be conducted during periods other than normal school hours.	Local Board	Annual Saving One-Time Cost	$3.08-million $2.4-million
2. Charge driver education pupils a nominal fee to recover vehicle operating costs.	Local Board	Annual Income	$1.07-million
3. Promote the use of loaned vehicles for driver education.	Administrative-State	Annual Saving	$53,000
Insurance			
1. Have the Risk Manager of the Department of Finance establish guidelines for purchasing insurance which could be adapted to the needs of various school districts and utilize larger deductibles, self-insurance, and noninsurance.	Administrative-State	Annual Saving	$550,000
2. Eliminate the danger of coinsurance penalties on fire and windstorm losses by having the carrier issue an agreed-valuation endorsement.	Administrative-Local		
3. Incorporate insurance industry requirements into specifications for school facilities planning.	Administrative-State		
4. Review security and property protection in school systems.	Administrative-Local		
5. Do not purchase collision insurance on school-owned buses and automobiles where the number of units is sufficient to assure a reasonable spread of risk.	Administrative-Local	Annual Saving	$130,000

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
6. Stop the purchase of fire, theft, and glass breakage coverage on school-owned buses where the number of units is sufficient to assure a reasonable spread of risk.	Administrative-Local	Annual Saving	$130,000
7. Establish a safety committee at each school site to make regular inspections.	Administrative-Local		
8. Review leases and other agreements to determine whether insurance obligations and responsibility for loss are adequately covered.	Administrative-Local		
9. Maintain an insurance schedule and filing system for policies, correspondence, and claim records in each district using guidelines set by the Risk Manager.	Administrative-Local		
10. Establish a fund or pool to insure elementary and secondary public schools, administered by the Risk Manager.	Legislative	Annual Saving Annual Cost	$3.36-million $110,000

Health Services

1. Employ regular graduate registered nurses.	Administrative-Local	Annual Saving	$1.6-million
2. Utilize public health facilities for school health programs.	Legislative	Annual Saving	$4.6-million
3. Avoid using nursing personnel for routine functions which can be performed by other employees.	Local Board		

Attendance Services

1. Revise the recordkeeping and reporting requirements for calculating average daily attendance.	Legislative	Annual Saving	$8.21-million
2. Utilize data processing equipment to process attendance records.	Administrative-Local		
3. Eliminate annual door-to-door census taking to provide enrollment figures.	Administrative-Local		
4. Eliminate attendance officers employed in all school districts where possible.	Administrative-Local		

Section III
Chicago School System Survey Reports

Governor's Commission on Schools
Business Management Task Force

Introduction

Comprehensive analysis of elementary and secondary education in Illinois has required special attention be given to the Chicago school system. This system is the largest single district in the state and represents 24% of the state's pupils, 26% of the state's teachers, and 27% of the state's educational expenditures. Due to its size and the corresponding complexity of administration, it was necessary to approach the Chicago school system separately.

While the effort of the Business Management Task Force of the Governor's Commission on Schools has concentrated on developing recommendations that have statewide impact, they have, by necessity, in many cases excluded the Chicago school system because of its special operating conditions. It has advanced sophistication in systems, procedures, data processing, and the like. In addition, Chicago's school system is governed by a separate section of the Illinois School Code.

In the time available to evaluate the Chicago school system, it was necessary to concentrate on those areas which could produce the greatest savings potential. Additionally, it became apparent that the nature of recommendations as they pertain to the system would need to be more specific and require more detailed documentation and support. Suggestions in the following sections will identify major problem areas and provide a means by which priorities for improvements can be ordered and a blueprint developed for meaningful implementation.

Overall, several major problem areas predominated in the 20 subject areas explored. Administrative personnel frequently fill positions for which they have little background or experience. Salaries are based upon academic achievement rather than comparable job requirements. Community group pressures apparently impact too greatly on decisions and actions of the board and administration. Teacher organizations are continuously exerting influence in management perogative areas. In many cases, tenure and job protection are flaunted by employees and are detriments to supervisory control. Finally, implementation of approved decentralization of operation management has not been effective with too many decisions remaining at the central office.

The task force has developed 20 functional reports regarding improvements in business practices. This would not have been possible without the fine cooperation received from the school staff. Furthermore, some of the recommendations are already accomplished or are in the process of implementation.

Administration

The Chicago school system is a large, complicated business with an annual appropriation in excess of $693-million. It has over 570,000 students who are taught in 568 public schools. The Chicago Board of Education employs approximately 21,500 civil service and 25,500 certified personnel. Additionally, 7,500 persons are paid under federal programs.

Reported administrative costs in 1971 for salaries, contractual services, supplies, and miscellaneous items totaled over $21.6-million. These account for 3.12% of net current expenditures compared with a statewide average in 1970-1971 of 4.11% and 3.8% nationally.

The comparative per-pupil expenditures for administration, using average daily attendance (ADA), as to national, state, and Chicago, is shown in the table to the right.

ADMINISTRATIVE EXPENDITURES PER PUPIL

	National	State	Chicago
1970-1971	$25.30	$39.87	$44.73
1969-1970	22.61	39.67	40.13
1968-1969	20.98	31.06	25.18

The Board of Education has 11 members appointed by the Mayor of the City of Chicago. They have been chosen to bring representation of various community, labor, civic, and business organizations with a cross-section of ethnic backgrounds. Meetings, open to the public, are held every two weeks to review reports, approve expenditures, consider recommendations involving personnel, construction, and so on.

Until 1966, the school system was highly centralized with all policy and operational decisions made by the headquarter's staff. Since then, based on a consultant study, the board has encouraged realignment of operational responsibilities and authorities.

In the attempt to decentralize administration of the school system, the city was divided into three areas each headed by an area superintendent. These areas, in turn, have been partitioned into 27 districts with an equivalent number of district superintendents who are responsible for supervising the educational and administrative operations of all schools within their districts. Supportive services such as purchasing, accounting, maintenance, and the like are provided from the central office or the shops on 31st Street.

EVALUATION

The board's activities are obviously cluttered with minutia. Instead of being a policy-making body, it is buried in operating details. While individual members criticize the administrative staff for failure to assume responsibility, the board has failed to delegate authority. Thus, the staff relies on the board to make decisions and are reluctant to make decisions as judgments are frequently and publicly questioned and the staff often verbally reprimanded.

Many key administrative jobs are filled by former teachers and principals who were promoted without previous experience, skills or knowledge of the fields. Paradoxically, despite their shortcomings, they are paid salaries relating to their educational levels which are excessive to those paid by industry for similar assignments. There is ample evidence that too much weight is given to community group pressures in making costly and important decisions as to school facilities, locations of schools, and staffing.

The attempt to operationally decentralize has not been as successful as it might be. Personnel in the central office continue to hold on to many functions which would be better administered by area or district personnel. Likewise, supervisory personnel have not been given authority for normal supervisory functions such as suspending insubordinate employees and providing some input towards their budgets. It appears many employees flaunt their civil service status.

RECOMMENDATIONS

1. Delegate many of the board's operational functions to the staff.

The board is currently spending an abnormal amount of time on matters such as approving bills, personnel transfers, and so on. A mutual agreement by the board and the staff as to areas of responsibility and functions would eliminate much minutia and free members for setting policies and devoting their time to more important issues.

2. Reduce the number of board committees.

The board has 23 committees. Board members, in addition to attending the biweekly board meeting, are serving on from four to nine committees or as representatives of the board on outside organizations. Implementation will limit the administrative functions which these members have assumed and permit them to direct their attention to policy matters.

3. Provide a training program for new board members.

Appointed board members rarely have business and administrative experience. They come with little knowledge of their roles and responsibilities. An indoctrination program, including explanation of budgets and reports normally submitted and of the duties and responsibilities of key administrative employees, will make new members effective participants in a briefer period.

4. Modify the code to permit the school board to hold executive sessions.

Presently, the Illinois Code requires all meetings, including those of committees, to be open to the public with the exception of discussions on real estate acquisitions, negotiations, and testimony relative to personnel discharges. Meetings of committees, preliminary budget hearings, and other administrative matters discussed in private sessions prior to regular board meetings would avoid the airing of disagreements among board members, permit more candid discussions, and provide a better public image of the role and activities of the board and its administrative staff.

5. Establish the position of Deputy Superintendent-Business Management.

Because few, if any, school administrators have management experience and background, there appears to be a need for instituting good business practices in accounting, controls, systems, and planning. Filling this position with an experienced, qualified executive will place overall responsibility for the above areas as well as produce better financial reporting and control systems. The annual cost is estimated at $35,000.

6. Establish a group comprised of persons from the business community to serve on a full-time loan basis for a period of one year or longer to assist the Deputy Superintendent-Business Management in renovating Chicago's school administrative system.

This study revealed that the Chicago school system has experienced growth without good management policy, procedures, and controls. It is apparent there has been a lack of business practices in establishing and organizing various departments and job levels within the system.

Many persons have been promoted or appointed to managerial positions from the certificated teacher and civil service ranks with no formal background in administration. As a result, several departments and their activities have not followed sound and proven management practices with an eye toward stringent economies.

A solution would be to provide a group of loaned business executives having a background and record of performance in various phases of business covering activities within the school system. The annual savings which would be gained from implementation are indeterminable but could run into several millions of dollars.

7. Raise amount of invoice requiring board approval to a more realistic amount.

Presently all bills of $2,500 or more require board approval. Commitment limits without board approval should be based on reasonable dollar levels in view of the size of the district. This will delegate to school management reasonable responsibility yet retain accountability, enable board members to devote more time to policy matters, and eliminate many meaningless reviews of inconsequential business transactions.

Federal-State Aid Programs

Current policies of the Chicago Board of Education call for consolidation of all administrative activities associated with government funds in the Department of Government Funded Programs. This policy originated with the organization survey of 1967.

Program cost accounting and control is accomplished in the Department of Government Funded Programs. General accounting activities relating to purchasing, receiving, payrolls, and accounts payable for government programs are performed in other departments. Claims are prepared and reimbursements are received and accounted for in the Department of Control.

While board policy dictates that government fund administration will be consolidated in the department, there are a few programs such as lunchroom and driver education which are clearly outside of the department's guidance.

Certain program activities which are more operational than administrative are performed in the department. Two examples are the bilingual and dropout prevention programs.

The Department of Government Funded Programs is responsible for administering about $100-million of the system's total revenues and expenditures. However, no information exists on the flow of cash receipts and disbursements related to government programs. Thus, the department has no means of controlling the timing of cash transactions making up approximately 15% of the system's total.

The Department of Government Funded Programs is set up to handle the three following functions: relations with funding agencies, program proposal development, and individual program administration and coordination. There are 150 employees in the department.

Financial control activities related to government programs include budgetary control over expenditures of each program and process control over accounting activities related to expenditures.

Budgetary control originates with development of a program proposal. Such proposals normally contain program budgets which are prepared in the Department of Government Funded Programs. Government agencies often furnish guidelines, but they may not specify a budgetary procedure. Of the proposals developed in the Chicago Board of Education, a substantial number vary widely in method and format. The Administrative Services Division of the Department of Government Funded Programs must interpret and redesign the proposal budget so it may be used as the basis for financial control.

This division maintains detailed budget records, approves individual expenditures on this basis and updates program budget balances. Program budgets are, however, subject to revision. Such changes are sometimes not reflected in the division's records.

In an attempt to increase reliance on the budgetary controls exercised in the Administrative Services Division, two control reports are widely distributed. These are the Expenditure Report by Project Number and the Fiscal Report. The reports provide data on the original budget, available balances, expenditures-to-date, and encumbrances.

Typically, a program expenditure originates when a purchase requisition is prepared in the school principal's office. This requisition may then be passed on for approval to district and area offices which pass it on to the central office. There, the requisition is forwarded to the Government Funded Programs and Administrative Services Administrators for review and approval. Then it is sent to the Division of Appropriation Accounting in the Department of Control and finally to the Bureau of Purchases.

As the merchandise is received, the principal's office initiates the administrative procedure. A receiving report is sent to the central office for matching against the vendor's invoice, and a claim is prepared and sent to the appropriate government agency.

The principal source document for updating the current central file of Board of Education property is the receiving report which is sent by the schools to the central office when merchandise is received. Other source documents include loss and transfer reports. These documents are received in the Division of Property Control where the file is in duplicate sequence by school and item type. Maintained since 1925, this file contains records on 24,000 items of equipment.

This file is not accurate enough for satisfying funding agencies or for internal property control. Therefore, the Department of Government Funded Programs has undertaken development of a second file. The Department of Systems Analysis and Data Processing is now maintaining this computerized file of Elementary and Secondary Education Act (ESEA) of 1965 property only, using purchase orders as source documents. The Department of Government Funded Programs intends to provide a complete physical inventory examination to assure initial accuracy of its file by 1973. At least once a year, on a cyclical basis, each school inventory will be listed. Each principal will review and update the list, returning it to the central office for use in updating the file.

There is pressure to maintain accurate inventory records of equipment paid for with government funds. Every item must be accounted for and the location of equipment controlled. Furthermore, state funds received by the Chicago Board of Education are determined on the basis of cost-per-pupil.

EVALUATION

The board's policy of consolidating government fund administrative activities in the Department of Government Funded Programs is reasonable. It is also logical that operational responsibility be with the areas, districts, and schools which have hands-on control of the programs. The department, under these circumstances, should not be involved with program operations, their success or failure. The clear separation and assignment of operational and administrative responsibilities are prerequisites to the proper management of government programs.

More conscientious enforcement of this board policy should be pursued by the department. Furthermore, titles of positions such as Director of Dropout Prevention Programs imply more than strictly administrative duties.

Reasonable exceptions to administrative consolidation in the department are those activities which are more effectively performed on a board-wide basis. General accounting, data processing, and many other activities are in this category. Preparation of claims, however, is now performed in the Department of Control. Thus, it does not appear that control over this activity is enhanced by keeping it in the Department of Control.

There is insufficient dissimilarity between the administration of the lunchroom and driver education programs and the other government programs to warrant separation. Administration of the driver education program, which suffers from lack of staff, would probably benefit from consolidation. Similarly, the lunchroom program could benefit from the relations maintained with state and federal agencies by the Department of Government Funded Programs.

The organization of the Department of Government Funded Programs does not conform to normal standards for span of control. The assistant superintendent of the department has nine direct subordinates. The Director of ESEA Programs has 14. Although the personnel currently in executive positions may have extraordinary capabilities, supervision will be deficient with this present span of control in the long run.

Budgetary control comprises two principal activities: development and maintenance of program budgets and their application for approving expenditures. The current procedures related to both activities appear to be deficient.

Preparation of program budgets is inadequate for purposes of internal budget control over program expenditures. The process of interpreting and reformating the budget for control purposes introduces errors into the budget records maintained in the Administrative Services Division. Additional errors are incurred when these records are not updated with budget revisions. In consequence, multiple approvals are required on each purchase requisition by organizational units keeping their own redundant accounting records.

Therefore, three problems exist which cause budgetary control over program spending to be redundant and ineffective: budgets are prepared so their adoption for internal control introduces error; budget revisions are not always reflected in the division's budget records; and reports received by organizational units are not adequate for informational and control purposes.

The processing of program expenditures is viewed as an accounting implosion. Control must be adequate to assure timely progress and accountability of every program expenditure through to reimbursement. Explosions must also be possible for analysis of individual reimbursements and claims.

Some means exist for controlling the implosion process in the form of open requisitions and purchase orders retained in the schools, several aging reports, and the Expenditure Report by Project Number. However, they do not comprise integrated control.

Procedural difficulties in the processing of program expenditures, together with certain agency requirements, makes monitoring the implosion very important. For reimbursement of program expenditures, claims must be accompanied by proof of vendor payment. But, the school principals are often remiss in sending receival reports to the control office, and the vendor is not promptly paid. Thus, prompt-payment discounts are often lost.

A possible solution, therefore, might involve a simpler clerical routine at the school, shifting the work load to the central office where there is more concern for administrative matters. An important implication of this evaluation is that the department has had insufficient attention from the Department of Systems Analysis and Data Processing. The deficiencies in budgeting and process control are essentially systems problems. Improvements will result only from a substantial effort in systems analysis and design and implementation.

The weaknesses of the file maintained in the Division of Property Control are as follows: source documents are not reliably submitted, the file does not identify items by government program other than ESEA, and the file is made up of index cards so file manipulation and listings make it difficult to furnish a school listing for audit purposes.

The file planned by the Department of Government Funded Programs will alleviate these shortcomings. It will be independent of school item reporting, distinguish different programs, and be maintained on a computer.

The planned property control system will be superior to the current board-wide system in the Property Control Division. Property Control will be able to depend solely on purchase orders, cyclical reviews, and the external auditor's examination. This will relieve principals of a substantial amount of clerical work.

RECOMMENDATIONS

1. Reassign responsibility for preparation of claims to the Department of Government Funded Programs.

Claims responsibility is a function of the Department of Control, although the necessary data come from the Department of Government Funded Programs. As a consequence, claims are not effectively controlled by either department. As an administrative activity in the Department of Control, it is contrary to board policy. Claims activities and necessary personnel should be moved to the Department of Government Funded Programs.

With this change, managerial control will be enhanced while there will be more conformity to board policy. The communication of data necessary to the preparation of claims will be enhanced with the result that the equivalent work and salaries of at least two persons will be saved. This will provide a cost reduction of $18,000 annually.

2. Reduce the span of control in the Department of Government Funded Programs.

The number of subordinates reporting to several of the department's executives is excessive, adversely affecting the quality of supervision. Their relationships within the department should be evaluated and the span of control limited in accordance with practical considerations.

The effectiveness of managerial control will be enhanced with more limited span of control and primary departmental functions will be more clearly defined. This change will involve the addition of two managers in the Department of Government Funded Programs and increase annual costs by $49,000.

3. Change the name of the Department of Government Funded Programs and position titles in the department.

Current name and titles imply operational responsibility which is undesirable for department management and contrary to board policy. The name and position titles should imply administrative responsibility only. Possibilities are Department of Government Fund Administration instead of Department of Government Funded Programs and administrative director instead of director. Operational responsibilities will be easier to avoid by administrative personnel if their titles are more explicit.

4. Reassign administrative resonsibility for programs now outside the Department of Government Funded Programs to that agency.

Several programs are now administered outside the department in spite of being contrary to board policy and their similarity to programs now administered by the department. Administrative activities associated with these programs should be consolidated there.

With this reassignment, improved staffing and control of programs can be expected. No net changes in staff are anticipated.

5. Monitor and control the cash flow related to government programs.

There are currently no facilities for supervising the receipt or disbursement of government funds to assure maximum possible leverage. A reporting system should be developed to monitor cash flow. It could use information and data made available in the process accounting file.

The ability to specify the losses incurred due to the lag of reimbursements behind disbursements for government programs would substantiate a request to the funding agencies for accelerating the claims procedure for obtaining government money faster. The result would be increased leverage and a consequent saving of interest costs for financing government programs. Even a small acceleration of claims reimbursement would yield substantial savings. The overall benefits to be attained through implementation are shown elsewhere.

6. Develop a uniform format for government program budgets which is satisfactory for presentation with the program proposal and detailed budgetary control.

The pressure to meet deadlines for a large number of proposals, combined with vague or absent budget preparation requirements by funding agencies, has led to program budgets which are not useful for financial control. Therefore, a uniform format and method for program budgets should be developed, and adherence to it should become a matter of policy. Funding agencies should participate in the development of the format to assure its acceptability when presented with program proposals.

A single budget will suffice for both proposal and control purposes. Neither interpreting nor re-formatting will be necessary. The errors now introduced into the records of the Administrative Services Division will be eliminated. Annual savings cannot be quantified at this time.

7. Implement a computerized budgeting, cost control and information system for use by the Department of Government Funded Programs.

Current budget preparation procedures are inadequate for program financial control. The exercise of control over program expenditures is ineffective, being dispersed among various organizational units because of insufficient or inaccurate information on program financial status. The status of expenditures in the administrative process is difficult to monitor. Adequate program financial information is not available to the department's top management.

A centralized budgeting, cost control, and information system should be implemented with four objectives to:

- Assure the preparation and maintenance of accurate program budgets in an amount of detail adequate for day-to-day expenditure control and program management.
- Permit the centralization of expenditure controls in the Department of Government Funded Programs.
- Provide accurate, timely information on program financial status.
- Reduce the need for staff intervention in the control procedure.

A centralized system would utilize a file of budget and expenditure data to provide information adequate for expenditure control and program management. Both budgetary and process controls would be enhanced by this centralization. Satisfactory detail and accuracy in program budgets would be obligatory.

Overall administrative staff could be reduced. Redundant accounting systems would be eliminated, expenditures being approved exclusively in the Administrative Services Division with staff intervention necessary only on an exception basis. It is estimated that the equivalent work of 20 persons in the department and 20 persons in areas, districts, and schools will be phased out for net savings of $354,000 per year.

8. Proceed with implementation of the property control system initiated by the Department of Government Funded Programs to cover equipment received under government grants.

The system currently in effect for all the board's fixed assets is not adequate. For internal control of property as well as satisfying accounting requirements by funding agencies, a property control system is needed.

The system of cycle property reviews, initiated by the Department of Government Funded Programs, should be carried through to include all government-funded equipment. It was originated when the department recognized that the files maintained in the Division of Property Control were inadequate.

The consequence will be an effective system of accounting for government-funded equipment, more accurate records of existing equipment, increased compliance with the accounting requirements of funding agencies, and less vulnerability to criticisms by these agencies and the public due to current lack of control. Potential annual savings cannot be identified at this time.

9. Extend the scope of the board's financial examination by external auditors to include a test of fixed assets.

The audit program of the external auditors does not call for physical examination of the board's fixed assets. Verification of fixed assets, as carried on the property control file, is needed for internal control of government funded property and satisfying accounting requirements of funding agencies. The physical examination of fixed assets is normally an integral part of the financial examination by external auditors. The board's auditors should extend the current scope of their examination to include it.

Inclusion of fixed assets in the external audit program would alleviate the necessity of a complete annual audit by the Department of Government Funded Programs and of additional audits by funding agencies. An examination by external auditors would be more acceptable to government agencies, even when performed on a sampling basis. It probably would be less expensive for the school board than the multiple audits now being performed.

The additional cost of an expanded external audit would probably be offset by the elimination of audits by the department and by board involvement in agency audits. Annual savings are anticipated but indeterminable.

10. Centralize and mechanize property control and accounting in the Division of Property Control, extending the system which was developed by the Department of Government Funded Programs to all board property.

With achievement of the property control system by the Department of Government Funded Programs, controls exercised by the Division of Property Control will be duplicated for government-funded equipment. However, the new system will be more accurate, more complete, and more flexible.

State funds determined on the basis of cost-per-pupil cannot be correctly calculated without an accurate evaluation of fixed assets. Therefore, the board should adopt this new system for all its fixed assets, assigning total responsibility to the Division of Property Control.

The current manual file will be eliminated. Principals will no longer be required to submit reports for property control. The receival report still will be necessary only for accounts payables. Fiscal examinations of fixed assets will be facilitated by the availability of property listings prepared by the computer. Duplication of control systems will be alleviated with assignment of total responsibility to the Division of Property Control. Additionally, the calculation of state funds will be more accurate.

With the installation and mechanization of fixed cost control, the equivalent of four clerical jobs will possibly be eliminated in the division to provide annual savings of $35,000. There will be additional time saved in the schools and more state funds might be the result of better accounting. However, these gains cannot be estimated.

Systems and Procedures

The Systems Analysis and Data Processing Department is responsible for automated and manual systems operations serving all administrative and educational units within the school system. It is managed by an assistant superintendent who reports to the deputy superintendent.

Business systems and procedure functions are assigned to the Bureaus of Advanced Planning Systems, Systems Design, and Operational Systems and Programming within the department. Each is managed by a director. Budgetary appropriations for the three bureaus approximated $575,000 in fiscal 1971. Personnel total 35. Two analysts are assigned to manual systems. All other employees are directly related to mechanized applications.

A generalized information system concept has been developed on the basis of past studies. An initial systems survey was started during the fall of 1970.

In April 1972, the board authorized an accounting firm to be employed for a period of two months to provide an accelerated impetus to this study. It also sanctioned the employment of seven systems analysts to be added to this project.

Systems analyst assignments are basically project oriented. Each of the existing programs is supervised and maintained on a relatively permanent basis by analysts assigned to the projects. Operating programs in business applications include the finance budget, personnel-position, payroll, materials, federally donated commodity and film distribution systems, as well as driver education, student membership, student scheduling, instructional materials, and testing analysis.

Areas are investigated upon request or observation of a need. The department has concentrated on data processing techniques concerning existing programs.

Few procedures which are not directly related to data processing are documented. Those that are documented are very informally done.

Within the overall school system, the long tenure of employees has tended to personalize the procedures. As special situations arise, individual units develop their own systems. There is an ordering control for forms printed outside the system. However, there is no form control system to ensure lack of duplication, proper numbering and utilization, or analysis for work simplification.

EVALUATION

The effort extended in correcting internal departmental problems in systems analysis and data processing has had a countereffect because overall responsibility for the other administrative and educational units has been neglected. No true analysis of systems requirements has been made since the broad conceptual mechanization study in 1961. During the subsequent period, administrative complexities have multiplied and federal and state governments have increased their involvement with related demands for reporting. The expenditure for systems analysis, which approaches $600,000 annually, is mostly spent to maintain an inadequate program.

The current mechanized systems have not been fully accepted by the users nor have surveys been made to determine their effectiveness. As a result, many mechanized operations are also being performed manually. Much of this problem is caused by lack of administrative control within the school system. Centrally developed systems are treated as optional by users. Manual procedures are often continued despite mechanization.

The systems study of the financial accounting areas was begun in the fall of 1970. This is a very expansive area of study and was approached with a staff of two employees until April 1972. The projected schedule of the systems analysts forecasts a need for 18 additional people with the design portion of the program carrying through until sometime in 1974 and for the whole project to take several years and requiring the full-time effort of 40 or more people. These forecasts cover only one segment of the overall school system. If other areas such as personnel, inventory control, school membership, and the like require similar expenditures of manpower and time, 20 or 30 years will elapse before the system is under control or a shorter period before there is a collapse in unchanged areas.

RECOMMENDATIONS

1. Establish an in-house systems task force.

The major problems concerning systems and procedures in the Chicago school system are the absence of an overall plan and lack of adequate design and control in areas where systems have been analyzed and implemented. In addition, the administrative organization of the school system is not geared towards the discipline necessary to introduce major changes in procedures.

The department is set up by function according to recommendations made by a consultant in 1967. In actuality, there is an overlap in functions and definitions do not apply to the work being done. There is no advance planning. Programming and Systems Design are performing identical functions of programming with the one area being more closely related to coding. Interspersed throughout all bureaus is an operation called data control. These are functions and responsibilities which should be performed by user departments.

The personnel of the department are strongly motivated and work hard. Development of effective systems and procedures requires specialized training and experience. Advancement from within is workable and desirable provided there is sufficient expertise to develop the capabilities of those promoted. Currently, this expertise is lacking.

Between 1967 and 1972, the Systems Analysis and Data Processing Department faced a myriad of problems. These included replacement of the top three administrators, a complete change in equipment requiring retraining of personnel, and a series of programs which were incomplete, undocumented, and ill designed.

This five-year period was used to straighten out internal problems of the department. Substantial improvements have been made in certain areas. Most of the programs have been converted into the native mode of the new equipment with many of the glaring errors corrected in the rewrite. These improvements are gradually making the projects workable and accepted on a piecemeal basis.

Partial mechanization is possible provided simultaneous system studies replace or adjust old procedures. In the school system, the manual procedures often duplicate what is being done on the computer.

One of the more important aspects of a service group is its ability to communicate verbally and in clear, concisely written instructions. In this respect, the department has good spokesmen. However, the more permanent written material has not been prepared in a style befitting the function's professional status.

In general, the condition of systems and procedures appears to be in a critical changeover period. Work that has been accomplished has not developed a flexible framework for future progress. The size and complexity of the Chicago school system requires utilization of the most advanced concepts of systems and procedures as well as computer mechanization to minimize expenses.

Before further work is done in mechanization, and certainly prior to Chicago's participation in a statewide improvement program can be achieved, a detailed systems analysis should be made of all facets in the school system and their interrelationships. This type of work is currently being done in the accounting areas under the supervision of a management consultant. It should be accomplished throughout all school system operations on as near a simultaneous basis as possible so a planned, coordinated effort of systems can be effected. A project of this nature has several implications:

- Supervision of the task force should be assigned to an executive with extensive experience in implementing large systems projects. He would report to the Superintendent.
- Current projects should be halted except when necessary because of changes in requirements.
- The current organizational setup of the Systems Analysis and Data Processing Department with separate bureaus should be suspended. A minimum team should be established for program maintenance and all other personnel assigned to the systems task force.
- Top caliber personnel from all departments should be selected as members of the task force subject to approval of the task force leader.
- Assistance should be solicited from private industry in the event the study team needs experts in specific areas.

Under the supervision of the task force leader, existing procedures can be documented, relationships of work between departments defined, and a planned approach to overall improvement designed. The priority of further mechanizations can be developed on the basis of need, economy, timing, and coordinated with the state improvement program. Only after a specific plan is developed should personnel requirements be established. This can be done on a project basis giving school management an opportunity to evaluate costs and gains and schedule approved action in line with current economic conditions.

The Chicago school system has a very powerful computer system. The existence of the current configuration should not be the determining factor in the design of the new programs. Questions such as batch processing as opposed to on-line processing, possible decentralization of input and output, and use of external services should be decided on merit. The equipment will be serviceable throughout the amortizing period and beyond because of the length of time associated with the planned large-systems project. It can also possibly serve as a base when design needs are determined. As areas are defined and projects for mechanization established, it would be advisable to visit with industry for an exchange of ideas and investigate the possibility of existing programs.

The systems task force should be properly supervised by an experienced staff. Benefits will include:

- Establishing an implementation unit to review and evaluate potential savings.
- Setting guidelines and goals for the staff which will more reasonably justify the current expenditure of $575,000 for systems analysis.
- Creating administrative controls so the overall design and specific project schedules will have approval and backing of top management of the school.
- Reducing the projected expenditures for additional help by using current positions on a temporary basis.

Initial implementation costs of $98,000 are estimated on the basis of hiring an experienced systems executive and staff assistants.

2. Establish a bureau for manual systems and procedures, including a trained staff in paperwork simplification and forms control functions.

The school system has over 40,000 employees. Almost all of them do some clerical work, whether it is a teacher taking and reporting attendance or a statistician assembling data. It is in this area of clerical procedures that the largest improvement is possible.

The systems staff should be responsible for issuing all clerical procedural instructions either by general bulletin or manual. Centralization of instructions will permit evaluation of procedures, forms, and content for duplication. Prior approval of the responsible department head is, of course, implicit upon release of instructions.

Establishment of standards, controls, simplified forms, and good work flow will provide the opportunity of savings in procedures and also clarify report requirements, record retention, and duplicated activities. In addition, it will aid in the determination of what should be properly mechanized.

The personnel requirements would be subject to the findings of the systems task force. There will be an initial cost to set up the bureau of approximately $60,000 to hire a director and at least two analysts.

3. Clarify the organizational structure of the Systems Analysis and Data Processing Department.

This department has responsibility for the design of systems and production of data in accordance with the desires of users. It should not be cluttered with its own miscellaneous operations. Three basic problems arise from this situation:

- Good internal audit control is violated.
- Administrative requirements take time from the purpose of the department.
- Different job skill requirements tend to lower overall standards.

Established in 1967, the department is an independent unit serving all administrative and educational groups within the school system. Since that time, more than 50% of the departmental personnel have been assigned or assumed other responsibilities such as student accounting maintenance, student scheduling, supply requisitions, and attendance auditing.

A separation should be made of the user and systems functions. This is best done by transfer of the functions to the departments which most closely perform similar activities. Clarification of the organization will clearly identify the personnel involved with business systems and programming to service the needs of other administrative and operating departments. In this manner, progress and accomplishments can be effectively measured and evaluated based on assistance given.

4. Upgrade personnel by hiring experienced systems personnel and programmers from outside the system.

The current staff is restrained by having little experience other than working their way through the data processing department. In addition, their educational background is limited. Systems and procedures and programming work require highly technical as well as administrative competence and varied backgrounds.

Technical competence includes business administration as well as data processing knowledge. Experience in paperwork simplification and in cost improvement and analysis techniques involving clerical and paperwork operations should be included as background for several positions.

Staff requirements should be determined by the systems task force. Current salary levels of the department are competitive if not slightly higher than business. Therefore, positions can be filled with experienced people without significant changes in the salary structure.

5. Solicit bids from local banking institutions for payroll processing.

The payroll programs are the oldest and most time-consuming of the current system. A complete rewrite is necessary with redesign of the entire project. Banks are currently issuing pay checks for many large institutions. They have systems experience and could probably help design a more adequate interim payroll program for the schools pending implementation of a statewide system.

Because of the large amounts of money involved, it would be possible to secure issuance and reconciliation services from a bank at minimum cost, if any. This could be performed on an interim basis using print tapes from the current systems. These tapes can be exchanged between the banks and the school system for proper accounting and necessary distribution of amounts. Control of the operation would remain at the board.

Benefits which would accrue to the school board approximate $130,000 in annual savings net of bank charges by eliminating 20 employees involved with production and maintenance of the payroll.

6. Encourage the staff to participate in professional meetings and seminars.

Systems and data processing are fields where great benefit is derived from exchange of ideas. No provision is made in the school budget for reimbursement of expenses for attending professional meetings. The department has $1,200 budgeted for textbooks. This fund could be used more beneficially if it were allocated to professional meetings. Benefits of attendance at these meetings would be updating of knowledge by the department's personnel plus keeping them abreast of the latest technological developments in methodology and equipment.

7. Conduct a review of telephone costs. While telephones are a vital part of district operations, there are many instances where expensive optional equipment is being used unnecessarily. These items include buzzers, intercom switches, automatic card dialers, colored instruments, and so on. Consulting firms are available to study telephone installations and recommend cost reductions with no loss of service. The annual saving should exceed $125,000 with a one-time implementation cost of $13,000. This recommendation has been made on a statewide basis and the savings claimed therein.

Data Processing

The electronic data processing (EDP) activities of the Department of Systems Analysis and Data Processing are comprised of the Sections of Operational Administration, Computer Operations, Keypunch Operations, Tabulating and Bursting, and Data Preparation. Budgetary commitments approximate $650,000 annually for a staff of 65 employees and are slightly in excess of $1-million for equipment and supplies.

Since the programs written for older equipment could be run on the newer machines, the department has been able to substantially upgrade its equipment and reduce costs. Computing capability of the school system's equipment has been increased about 10-fold between 1967 and 1972 and is rated as very powerful.

Programs are run under the multiple fixed tasks option of the operating system. Several programs are on line-random access and partitions are assigned for extended periods. Program testing is a hands on method with blocks of time assigned during the prime shift. Emulation modes are used for many programs.

Meter time of the equipment used for business applications averages about 430 hours per month, the equivalent of 2.5 shifts. Three full shifts plus overtime are used on weekends.

Scheduling requires submission of a production request sheet for every job to be run either by Data Preparation, Systems Analysis, or other users. Equipment is scheduled on a day-to-day basis based upon the request sheets. Data Preparation operates as a service bureau for projects such as student accounting materials, student scheduling, and textbook accounting. Reconciliation of payroll warrants is also part of the section's duties. Tabulating is mainly concerned with the payroll processing and for proof runs made on punch cards.

An offsite storage area is used for backup storage of tapes and control programs. Some security features have been introduced including badges for off-hour admission to the data processing areas. Back-up of computer is by tacit agreement with the City Treasurer's Department and similar equipment is available at the supplier's Data Center. A service bureau is used for peak load keypunching so the keypunch staff can be maintained at normal levels.

EVALUATION

Equipment costs have been substantially reduced while computational power of the devices has been dramatically increased. The equipment has much greater capacity than needed if all programs were running in proper mode and design. However, with the possibility of a major revision in programs, such as projected in the accounting improvement program review, all testing and parallel runs will require this configuration.

Programs on the system were designed for slower and smaller equipment. Rewrite into the current machine-native mode did not change the design. As a result, the equipment is inefficient with many short runs and multiple setups. The internal machine accounting format for the operating system has not been implemented. Therefore, it is difficult to measure central processing unit efficiency against meter time which records whenever any attached equipment is running.

An estimate would be that less than 20% of the computing power of the equipment is used. Input and output definitely dominate in the old programs. A complete rewrite is advisable after systems analysis of the projects.

Scheduling for the fixed partition system is adequate. However, recordkeeping seems excessive. Operators keep a record with start and stop times, run codes, and comments.

Data preparation has many functions which are more defined as user than EDP responsibilities. Several of these functions were developed during the initial installation of a program such as establishment of student records for mechanized student accounting and the like.

Once the conversion was completed, this function was assumed by Data Processing rather than being transferred to the unit most closely concerned with student records. Reconciliation of payroll warrants is misplaced in this area. A recommendation which includes these functions is contained in the Systems and Procedures section of this report.

Systems design is the major problem for Data Processing. The operating function is well supervised and workers are enthusiastic and willing. But use of inadequate programs and excess manual manipulation on sophisticated equipment results in expensive misuse of this equipment. Changes in some practices and in the operating system could make more time available.

Use of a full-scale tabulating system in addition to the large computer system is required because of the ancient payroll system which is run on the computer. It must conform to specifications of the City Treasurer who clears the warrants. A change in processing can be installed without a change in systems design by changing the clearing procedure.

Security precautions represent a good beginning. Existence of a classroom, used frequently at night by both school and nonschool personnel, requires that greater security precautions be introduced. Management is aware of this need and has recommended proper steps.

RECOMMENDATIONS

1. Clear subwarrants or vouchers through the banking system rather than City Treasurer.

At present, the clearing of subwarrants or vouchers through the City Treasurer requires use of a punch card system which is antiquated and costly. A warrant must be printed on the computer and, simultaneously, a card is punched. The two are then run through a reproducer. Possible errors and problems under this procedure are numerous. Additionally, the procedure is an uneconomical use of a computer. It makes the speed of the run equivalent to the slowest attached unit.

The banking system already codes the transaction under its normal process. Clearing warrants through a bank would permit a print-only requirement at the board. Thus, all punch card processing could be eliminated. In addition, any bank would be in a position to provide tapes for reconciliation purposes.

Use of this facility would eliminate the need for the complete tabulating setup currently maintained at a cost of $24,000 annually. It would also make the payroll process a matter of hours instead of days and reduce the requirement for tabulating and reconciliation personnel by four. Implementation will provide annual savings of $60,000.

2. Implement more powerful features of the equipment's operating systems.

The EDP equipment used is designed to operate most efficiently under the Multiple Variable Tasks (MVT) environment of the operating system. The Chicago system is using Multiple Fixed Tasks (MFT) which limits flexibility. Also, it has not implemented the System Management System (SMS) or the internal accounting system.

These options are available and can be introduced by the system programmers by a new system generation of the operating system with minor changes required in program control cards. Use of MVT will permit more flexibility in operations since the number of simultaneous tasks can be adjusted to the core requirements. More efficient use of the equipment will result in reduction of overtime costs of $20,000 annually and greater availability of the facility.

Utilization of the SMS concept will permit a fully mechanized log of equipment use. This information gives a more accurate method to evaluate use by department, program, and project. Thus, inefficient areas can be highlighted for redesign.

3. Introduce remote testing.

Programmers are assigned blocks of time to test their programs. This method ties up part of the computer and results in inefficiency of computer operations and overcontrol by programmers of their projects. Remote testing should be introduced and the computer operated in a closed-shop environment with only operators handling the machine and input/output.

Introduction of remote testing will increase the efficiency of operations. Simultaneously, it will be a good tool to train programmers to write and submit programs and modules which are not dependent on the programmer for successful runs. Elimination of "hands on" testing, together with the previously recommended upgrading of the operating system will permit accurate evaluations of time needed for computer operations, reassessment of staffing requirements, and better utilization of equipment.

4. Minimize clerical activities of operators.

Operators are required to keep a manual log of computer operations by inserting times, completion codes, and program numbers. These clerical duties account, in part, for the difference between meter hours and scheduled work hours.

Clerical time on the part of operators should be kept to a minimum since the activity is recorded mechanically on the console typewriter log. Exceptions and tape numbers assigned to output should be the only required clerical entries. A reduction of peripheral work should increase efficiency of the operation.

Accounting and Auditing

The Department of Control is organized into five bureaus which employ 164 people and will spend approximately $2-million in fiscal 1972. The bureaus are Budget, Federal and State Claims, Accounting, Payrolls, and Audits. The latter three administer the accounting and auditing functions. They employ some 150 persons and each is headed by a director, chief accountant or supervisor.

Although the primary concern of the controller is accounting, he has other financial responsibilities. These include depositing funds received by the school board and investing monies not needed to meet current obligations. This may total several million dollars at any given time. The accounts payable section processes between 150,000 and 200,000 invoices, amounting to over $100-million each year. The payroll section will pay more than 50,000 employees some $500-million in fiscal 1972.

Revenues and expenditures are defined within functional classifications by accounts and detailed subaccounts. These established basic line items to be budgeted, accounted for, and reported in the annual financial statement. Most schools surveyed also maintain a separate record of expenditures for each applicable line item. Much of the accounting work is processed through data processing equipment.

The classification of accounts used by the Chicago Board of Education follows the guidelines established by the State of Illinois. This helps standardize some reports, but does not meet all of the system's needs. In addition, other state schools operate on a fiscal-year basis while Chicago uses the calendar year.

For the most part, Chicago operates on a cash basis during the year. It switches to an accrual basis at year end to determine the current position and needs of the school system. The only formal closing of the books is completed by the outside auditor at year end.

Purchase orders, as issued, become the basis for reserving funds for future expenditures. The schools surveyed reported they maintain a second record of encumbered funds. The second set is needed since an ordered item may not appear on the school's Monthly Statement of Account for several months.

The Bureau of Audits has the responsibility, where possible, of determining if board policies and rules are being followed. The primary items audited are payroll records and school activity funds. The Division of Lunchroom Audit does the accounting and preparation of reports for lunchrooms. Less than 5% of the time involved is spent performing actual audits.

EVALUATION

The accounting systems used by the Chicago Board of Education have many major problems. Few procedures manuals or defined systems are to be found. Adequate accounting controls are almost nonexistent. Functional responsibilities are vague.

The basic function of an accounting system should be to respond to the needs of financial planners and operating people, indicating where and how monies are being used. However, reports received from the accounting and computer areas do not meet the needs of people in the field.

There is much duplication of effort in the accounting functions. For instance, employee attendance sheets are reviewed at least three times for errors, prior to processing the payroll. The computer area has a great deal of excellent equipment which could be valuable in any accounting effort. However, it is not properly utilized and the personnel in the computer and the accounting sections seem to be working at cross purposes.

Processing takes an inordinately long time and may not be accurate. Programs are archaic. In some cases, the work could be done faster and more efficiently by hand.

RECOMMENDATIONS

1. Install a new accounting system.

The present accounting system lacks overall goals and objectives and there is much duplication and inefficiency. As a result, most school units, district, and area offices must maintain records of their own although this should be a routine function of a centralized system.

Therefore, a new accounting system should be designed, establishing cost centers at each school. In this way, similar activities could be compared and administrative costs allocated to each of the centers.

Comprehensive reports should be developed to meet the needs of area and district superintendents. Line-by-line comparisons should be made of each school's budgeted and actual cost of operation. The books could be closed monthly to reveal the current status of the school system.

In redesigning the accounting system, close coordination should be established with the computer operations. New EDP programs and routines should be developed to provide meaningful reports on a timely basis.

Implementation of the proposed system will require approximately four years at a total one-time cost of $500,000. However, the benefit is estimated at as much as 30% of current accounting area salaries with additional time savings to be realized by school personnel engaged in accounting work. The total annual saving will be almost $1.02-million.

2. Establish a central receiving point at each school unit.

When accounting personnel receive an invoice, they must wait until a receiving report arrives or the invoice is approved to make payment. In mosts cases, the invoice must be sent to the principal or engineer at the school for formal approval.

A problem may arise in the school if the engineer or clerk takes delivery on an item and a teacher or librarian counts and checks the material at a later date. In these cases, the receiving report may not be sent to the accounting area.

Therefore, one person should be assigned to the task of receiving and counting items. He would then send the receiving reports to the accounting area on a designated date. Determinations of material quality would rest with the person who ordered the item. Although actual savings would be minimal, the time involved in processing invoices would be substantially reduced.

3. Implement an auditing procedure to pinpoint schools which are not processing receiving reports promptly.

At present, there is no procedure for controlling late receiving reports. If each school sets up a central receiving area, as proposed, a file of purchase orders and invoices could be set up in the accounts payable section. In this way, each school could be audited periodically to ensure that it was processing receiving reports promptly. No additional cost of implementation is anticipated.

4. Speed up payments of vendors' invoices.

An average vendor can expect to wait 60 to 90 days to receive payment. In some cases, it may take one year. Many firms make several contacts with the accounts payable section to obtain their money. Some invoices, especially in the school lunch program, which are carefully watched get paid on time. Substantial losses of discounts have been encountered. Based on a sampling of paid invoices in 1971 and 1972, lost discounts appear to amount to $500,000 annually.

In some cases, it has been observed that low bids are awarded on the basis of a large discount which the vendor feels may never be earned. Several companies raise prices so the school board could earn the discount whenever they paid the bill. Also, a number of vendors do not bid because of the problems with collections.

Carrying accounts receivables for an extra 30 to 60 days, and the follow-up costs for collection, are substantial for every company. These firms are passing this cost to the school board in the form of higher prices. Funds to pay bills on a current basis appear to be available. Savings in lost discounts could amount to $500,000 a year partially offset by the reduction of interest income to a net annual saving of $320,000.

5. Eliminate the detailed checking of the attendance reports received by the Bureau of Payrolls.

When attendance reports are received in this bureau, they are checked three separate times. Personnel at the schools also review the reports before they are sent to the bureau. The entire procedure requires almost 85 man-days per payroll period. Eliminating two of the three audits would not decrease accuracy. However, it would reduce the time involved to five man days for an annual saving of $82,000.

6. Establish a procedure whereby all sick, personal, and vacation days are determined and assigned at the same time.

Under the present rules, vacation days are assigned July 1, personal days determined on January 1, and sick days on September 1. The procedure is handled on the computer and 60 people work on verifying the information for a full day three times a year. By assigning all days off at the same time, the three days' work will be reduced to one for an annual saving of $14,000.

7. Establish a Division of Lunchroom Accounting in the Bureau of Accounting.

At present, the Division of Lunchroom Audit does all of the accounting work connected with school lunchrooms. Because of this, the auditors spend approximately 95% of their time doing accounting and clerical work. Thus, the current procedure prevents them from devoting sufficient time to their primary responsibility of auditing lunchroom operations.

To solve the problem, a Division of Lunchroom Accounting should be established. The staff would consist of one graduate accountant and nine accounting clerks. Such a restructuring will provide an annual saving of $10,000 through eliminating the use of highly paid personnel to perform routine clerical functions.

Financial Management

School financial management is handled by the Chicago Board of Education's Department of Control. Funds are received primarily from the local, state, and federal governments. Revenues in 1970 were $624-million. Approximatey 51% of this total or $316-million was derived from local property taxes. Some 34% or $212-million came from the state government, 12% or $73-million from federal sources, and 3% or $23-million from other collections.

Because of wide variances in the amount of available cash at certain periods of the year, borrowing via tax anticipation warrants and general obligation notes is required. In recent years, such loans have amounted to approximately $200-million. At other times of the year, short-term investments have approximated $500-million. Mortgage-type loans from the Chicago Public Building Commission and building leases are also used as financing tools.

Receipts and disbursements must go through the City Treasurer of Chicago, who is the ex officio treasurer for the board. He also handles banking relations and furnishes the board with daily and monthly cash balance figures. Actual receipt of monies from the local, state, and federal governments comes on a calendar or fiscal year basis as follows:

- Local—Cook County operates on the calendar year basis. Property tax levies are made in January. They are collected in June and September of the following year. Only 85% of the 1969 and 1970 taxes were collected in 1970 and 1971. Because of the time lag between levies and collections, the board relies heavily on its ability to issue tax anticipation warrants and general obligation notes to finance present expenditures. The annual cost is approximately $10-million to $12-million. Monies required in addition to regular budget levies must be raised through local referendum or by approval of the General Assembly. Funds may then be obtained by selling bond issues which will be repaid through additional property tax levies.
- State—In January, when the Chicago board budgets for the calendar year, the amount of distributive state aid for January to June has been set. However information on payments for the last six months is not available until July. Additional state funds are received as reimbursement expenses for categories such as special education, lunch and milk, summer school, and the like. This type of aid is received after the claims are prepared by the Chicago school district on a monthly, quarterly or annual basis.
- Federal—Most federal money is obtained on a claim basis and comes to the state before distribution to the school districts. Thus, these monies are also received for programs after they have been spent.

The budgeting process for Chicago begins in early summer and is usually completed by the following January. The budget has a line item format which includes expenditures, purposes, spending units, and funds involved. There are no less than four printings of the budget prior to the final two published for board, staff, and public use. The cost of these two printings was $75,000 for the 1971 budget. Numerous adjustments must be made to the published figures when estimates of revenues become known or programs are changed.

EVALUATION

The process of preparing the annual budget is very time-consuming. Also, the finished document cannot be relied upon for planning purposes because of the numerous changes made throughout the year. The problem of matching revenues and expenditures is compounded by the variance in the fiscal year between the Chicago system and the normal school year. Comparisons of actual expenditures to budget are difficult to make because of a six to eight week delay in expenditure reports and do not reflect up-to-date budget revisions.

Because of the board's interpretation of the Illinois School Code, an organizational unit cannot move excess monies from one fund to another. The practice, therefore, is to spend the money in a particular account even though the items or services purchased may not be needed.

When funds become available, they are used to repay debt obligations or are invested as soon as possible. However, a problem arises because property tax receipts are not coordinated on a timely basis with major expenditure periods. Since there is no control point for the receipt of state and federal aid checks, deposits are sometimes delayed for a number of days.

Also, distribution of operating funds to Chicago takes longer than is necessary. From seven to 15 days may elapse before the monies reach the board from the county superintendent's office.

The board is dependent upon the City Treasurer of Chicago for its banking information and this is furnished only on a delayed basis. Thus, exact cash positions cannot be accurately assessed. Although monthly cash balances have been reduced, there still is potential for improvement.

It is recognized that if the following recommendations are implemented, $1.5-million to $2.5-million of the $17.6-million savings to be realized will result from the transfer of interest earnings to the school system now reported primarily by the State Treasurer's office. However, responsibility and accountability will be correctly placed and the true cost of education in Illinois will be more accurately stated.

However, implementation of recommendations on property taxes, penalties, and amounts held in escrow will provide, in addition to the income claimed for the school system, $6.4-million of annual income to other taxing bodies. The recommended change in the method of collecting property taxes will add $1.2-million of income per year to those other tax units as well as a one-time income of $158-million.

RECOMMENDATIONS

1. Participate in the pooled cash and pooled investment fund to provide immediate use of revenues and optimize earning power of assets.

The Chicago school district is losing millions of dollars annually because it borrows funds temporarily to finance state and federal aid programs as well as property collections until these funds are received. It also loses additional millions through its inability to collect and invest funds on a timely basis at top rates.

The pooling of cash concept, currently used by many large corporations and trust departments of metropolitan banks, provides a solution to this problem. In this concept, all funds, both federal and state, are immediately placed in a common cash pool on the due date.

This pool becomes the depository for all receipts and the source of funds for payments made by the school district. Transfers from this pooled cash fund to local banks are made as needed to cover the total of local vouchers paid. Minimal balances are kept in local banks to cover service costs. Excess funds in the pool are invested and earnings on these funds are credited to the district depending on its balance available for investment. This concept provides the following benefits:

- Immediate transfer to the common cash pool of all state aid, on the date of payment, will increase earnings or reduce borrowing costs of the pool and the school district by $835,000.
- Prompt payment of general state aid, when legally due, will increase earnings or reduce borrowing costs by $980,000.
- Payment of all other state aid on an as-needed basis, rather than on a reimbursment basis, will increase earnings or reduce borrowing costs by $754,000.
- Immediate transfer to the common cash pool by the state of all federal aid on the date of payment will increase annual earnings or reduce borrowing costs by $289,000.
- Change in payment method of federal aid, not now paid on an as-needed basis from the present reimbursement method, will increase earnings per year or reduce borrowing costs by $701,000.
- Direct collection of property taxes and immediate transfer of such funds to the common cash pool and a change in the collection procedure to the use of lock boxes will increase earnings or reduce borrowing costs by about $2.87-million.
- Investment of all daily balances now in district bank accounts in a common co-mingled investment pool will provide earnings of approximately $195,000.
- Co-mingling of all existing district investments in a common pool will increase annual earnings for Chicago by $450,000.

Current narrowly restrictive legal investment policy must be broadened to permit investments in keeping with normal and customary business practice. Net annual income to be derived is estimated at about $7.1-million.

2. Issue lower cost general obligation state bonds in lieu of district special revenue bonds to finance capital improvements.

It is estimated that $46.8-million of capital improvements will be acquired by the Chicago school system each year for the near-term future. This amount must be raised through the sale of special revenue bonds. Chicago carries a lower rating than the State of Illinois, currently AAA, and consequently a higher interest rate. This difference is estimated to be 50 points.

A solution would be to replace all local special revenue bonds with State of Illinois General Obligation Bonds. Local authorization can be continued by the referendum process. The proceeds of local bond tax levies can be assigned to the state to provide the basic source of funds for the repayment of these bonds, thus, saving $234,000 in interest the first year. They will total $2.46-million over the 20-year life of one year's issue.

By financing buildings presently constructed by the Public Building Commission through the issuance of state bonds, an additional $386,000 first year interest charge will be saved. Interest savings will total $6.51-million over the 20-year life of the first year's issue and will peak at $6.51-million in the twentieth year. It is estimated that Chicago placement costs will not be reduced materially.

3. Discontinue the issuance of local short-term notes and replace with state-issued short-term general obligation notes.

Due to the timing of the collection of property taxes, the principal source of school revenue, the system is issuing short-term notes. As of June 30, 1971, $326-million was outstanding and payable from future tax collections. In fact, Chicago is borrowing against tax collections for two years in the future. The interest rate applicable to these notes is higher than would apply to state-issued short-term general obligations.

The issuance of local short-term notes should be discontinued and replaced with state-issued short-term general obligations. State notes will carry a substantially lower rate, and will result in savings to the Chicago school system of $4.16-million annually.

4. Change payment plan for local property taxes to a pay-as-you-go basis, with 1/12 of the tax due on the fifteenth of each calendar month, beginning January 15.

About 30% to 35% of annual property taxes are paid during the first half of each year, usually in June. Most of the balance becomes available during the September through November period. However, the school system has teachers to pay, and other operating expenses to meet every month of the year. This method of tax collection forces the school system to borrow against future tax collections to pay current operating expenses or levy taxes higher than necessary to build up cash reserves to meet those obligations as they become due.

The present method often works a hardship on individual taxpayers who can realistically budget their monthly income to meet expected monthly expenses, but cannot budget to meet an unknown semiannual payment. It also grants a windfall to the financial institutions who grant mortgages only if the mortgagor deposits the estimated annual tax bill with them monthly on a pay-as-you-go basis. Such escrow deposits are retained by the financial institutions and are paid to the various tax collectors on the due date. Thus, the institutions, not the school system, have the use of these deposits.

Therefore, the property tax payment plan should be changed to a monthly pay-as-you-go basis. The first six payments would be estimated based on the prior year's taxes. The last six payments would be adjusted to reflect the actual tax less the payments made in the first half year.

This change in method will enable the school system to plan its tax receipts on an approximately equal monthly basis throughout the year. The net advance in timing is 60 days, and most of this will be as a result of institutional mortgage holders remitting tax deposits as received.

The change in the timing of such tax receipts, based on 1970-1971 tax collections, will result in additional income to the Chicago school system of $1.13-million principally from reduced borrowing. Furthermore, by starting the plan on September 15, after the second half of the taxes in the year of conversion are due, the district will pick up a one-time revenue gain of $99-million. Costs associated with implementation have been included in the calculation of benefits in a prior recommendation.

5. Pay to the Chicago school system its portion of all penalties collected for the late payment of real estate and personal property taxes levied.

Real estate and personal property taxes are due twice each year at specified times. If paid after the due date, a penalty of 1% per month or fraction thereof is collected. However, penalty fees are not remitted to the system. As a result, it loses the use of the tax revenue, is denied the penalty imposed for late payment, and is forced to borrow money to operate. Other taxing bodies, through historical precedent, receive the economic use of tax funds rightfully belonging to the school system.

Therefore, all penalties collected for the late payment of the school portion of real estate and personal property taxes levied should be paid to the Chicago school system. Based on an analysis of late tax payments deposited, implementation will transfer about $1.45-million annually to the Chicago school system.

6. Increase the penalty for late payment of real estate and personal property taxes to 2%.

When the notion of a penalty was first conceived, normal credit customarily used by most taxpayers cost 6% a year. Therefore, a late charge of 1% per month or 12% per year represented a true penalty. Today, with revolving credit at 1.5% per month or 18% per year, a rate of 12% no longer represents a penalty. In fact, it is cheaper to pay one's revolving credit charge, delay payment of property taxes, and save 6%.

Therefore, the penalty for late payment of property taxes should be increased from 1% to 2% per month or fraction thereof. The charge for late payment would once again be a penalty since the charge would be greater than for late payment of other credit accounts.

An increase in the penalty rate will probably not speed up tax payments. For example, experience by many banks in increasing bad check charges from $0.25 to $2 or $3 has not decreased the number of bad checks written.

It has merely increased the revenue of the banks taking this action. The change in the penalty rate will increase total revenues by approximately $1.45-million per year.

7. Eliminate the practice of placing in escrow those taxes paid under protest.

Taxes paid under protest are held in escrow by the tax collecting body, and not remitted to the school system until the protests are settled either administratively or legally. Alternately, an amount equal to 1% of total taxes collected can be held in escrow to "protect" those taxes paid under protest from being spent by the taxing body, and hence not available for rebate to the protesting taxpayers. This, of course, results in additional borrowing by the system. Of recent concern are court decisions holding that all personal property taxes for 1971 collected in 1972 must be held in escrow pending the outcome of certain legal suits.

A solution would be to eliminate the practice of placing protested taxes in escrow and provide the funds to the school system. Such protection is unnecessary, costly, and deprives the school system of the use of these tax revenues. The school system has the right under law to levy taxes each year to meet budget requirements within applicable levy limits. Legal and fiscal protection can be given to protesting taxpayers by a statutory lien on the first future tax collection of the system after such protests have been settled.

The release of these funds held in escrow will increase earnings of the Chicago school system by $78,000 annually. The further release of 1971 personal property taxes, collected in 1972, will make available to the system $40-million. This will earn an additional $1.72-million in interest per year until the matter is adjudicated.

8. Change the forecast percentage of uncollectible tax levies to reflect recent years' experience.

Tax collections for 1970 and 1971 were only 85% of the levies while the budgets for these years were developed on the basis of a projected 91% rate. Thus, although the board underspent its budget authorizations for 1971, it experienced a deficit cash flow for the year. Establishing the budget on the basis of recent collection experience would eliminate such deficits by matching the proposed expenditures to revenues.

9. Establish a treasurer's position that reports directly to the Chicago Board of Education.

The City Treasurer of Chicago serves as ex officio treasurer for the Chicago Board of Education as well. The result of placing this intermediary between the Department of Control and the banks used by the board creates a delay in dissemination of cash position information.

Establishing the proposed treasurer's position would provide better management and internal control as well as faster banking information. The assignment could be merged into the duties of the Finance Officer in the Department of Control at no additional cost.

10. Convert Chicago's accounting year to a September 1 to August 31 basis.

At present, Chicago must coordinate its calendar year budget with sources of revenue which operate on a fiscal year basis. This practice is not natural to the school year nor is it compatible with the fiscal year reporting of other school districts.

Changing to a fiscal year would permit greater ease in managing Chicago's budget. It would also provide continuity in reporting to the state and federal governments.

11. Revise budgeted positions to reflect actual job requirements.

There are many instances in which higher-rated jobs listed in the budget are filled by persons of lesser skills and classifications. The budget is thus inflated by the difference between the dollars budgeted and the amount expended. To eliminate the problem, job descriptions for civil service employees should be updated to reflect actual needs. Potential savings in the budget will be substantial.

12. Reduce the number of published final budgets.

Some 1,530 expanded and 435 condensed versions of the 1971 final budget were printed. Only 851 copies of the large budget and 124 copies of the smaller one were distributed. Therefore, formal publication should be reduced by at least one-third for an annual saving of $5,000.

Personnel

The Chicago Board of Education employs approximately 21,500 civil service and 25,500 certified personnel such as teachers, principals, and administrators. In addition, about 7,500 persons, paid under federal programs, are employed in the system.

The basic personnel function includes recruiting, selection, salary determination, employee relations, and benefit programs. The 1972 appropriation authorized a staff of 116 people for the Department of Personnel. Of these, 23 are certified personnel and 93 are civil service employees. In addition, 22 persons are paid with federal funds.

The number of teaching positions is budgeted annually through suggestions by the principals to the 27 district superintendents. Civil service requirements are established by recommendations of the department head to the City of Chicago's Civil Service Commission. In both instances, final approval is given by the Chicago Board of Education after a review of the entire budget.

Job descriptions are completed by all civil service personnel. These are approved by the immediate supervisor and department head. The descriptions are maintained by the Civil Service Commission which makes periodic audits to ascertain and verify their accuracy.

As a position is opened or a vacancy occurs, a form prepared by the principal or department head is forwarded to the Department of Personnel. In turn, the department notifies the Civil Service Commission of the opening. If an examination for that position has been held, the commission advises the department of the qualified applicants in rank order. If no list is available, an examination is called. The person with the highest examination score must be hired if he passes the physical. In the event a prospective employee does not want the job, a waiver must be obtained before the second person on the list can be approached.

To become a teacher or principal, qualified candidates must obtain a certificate issued by the Chicago Board of Education after passing an examination given by the Board of Examiners.

Salary determinations for noninstructional employees are made by the Civil Service Commission. Both city and board civil service employees have the same salary ranges.

After reviewing the position, a determination of its proper classification is made by the commission. Periodic surveys of local and area industry as well as other school systems are made to keep the minimum and maximum ranges competitive. Salary increases are based on length of service. No program for merit increases exists.

Attendance officers, library assistants, vision and hearing testers, and teachers aides, although civil service employees, are represented by the Chicago Teachers Union. Their salaries are determined through contract negotiations.

Salaries of teachers, principals, and other certified personnel are negotiated by the Chicago Teachers Union with the board. Many administrative positions are filled by certified employees. Thus, union negotiations have a direct impact on the cost of many nonteaching services.

In March 1971, the board approved an Administration Compensation Plan to be effective September 1, 1971. The plan, which requires establishing objectives and hiring a performance appraisal administrator, was, unfortunately, only partially established as no funds were allocated by the Chicago Board of Education for implementation.

With the exception of a manual for school clerks and one for security officers, training is done verbally. Employee grievances are handled on an informal basis. If the department head or district superintendent is unable to satisfy the employee, the Director of Civil Service Employees is consulted and a hearing held by him with both parties.

Civil Service personnel records are maintained by hand posting to individual cards. The cards, containing a work and salary history, are kept alphabetically and a duplicate filed by position. No information as to previous employment and personal data (other than birthdate, social security number, and address) is officially available to the Department of Personnel. The commission keeps all applications, test scores, and the like.

Employees are rated biannually by their immediate supervisor on quality and quantity of work, dependability, personal relationships, attendance, and promptness. No criteria are provided to distinguish between outstanding, excellent, good, fair or unsatisfactory. This rating is used by the commission to determine a person's eligibility for promotion and to ascertain if a probationary employee should be employed.

There is a formal grievance system provided under the contract with the Chicago Teachers Union. Beginning with the principal, the procedure can move from the district superintendent to the general superintendent and finally, to the board.

Certified personnel records are maintained on a computer. A viewer which is located in the Bureau of Teacher Personnel, permits ready access to all pertinent data.

No benefit handbooks are published for civil service employees. Depending on their type of work, personnel are members of either the Municipal Employees' Annuity and Benefit Fund or the Laborers' and Retirement Board Employees Annuity and Benefit Fund. Administration of these programs is done by the officers and staff of the funds.

Life insurance of $2,000 as well as hospitalization and major medical coverage for the employee and his family are provided at board expense. A tax-deferred pension program is available to certified personnel upon request.

Administration of the insurance programs was recently transferred from the Department of Personnel to be consolidated with nonpersonnel insurance functions in the Department of Finance.

EVALUATION

Attempts to maintain an effective personnel program are thwarted by certain practices and rules of the board as well as abuses of civil service and tenure. The board has assumed an administrative role in such matters as contract negotiations, employee grievances, and other personnel matters.

It has become customary to promote certified principals to noninstructional administrative positions at salaries higher than would be paid qualified, experienced counterparts in industry.

The board has many dedicated people on its staff. However, reports by supervisors indicate that many employees abuse their civil service protection. In addition, incompetent teachers may be kept on the payroll because of tenure. While some personnel procedures and policies are up-to-date and effective, many others could be improved.

RECOMMENDATIONS

1. Update the current job descriptions for administrative positions on a continuing basis.

Present job descriptions do not reflect changes which have occurred since a 1968 study by a consulting firm. Newer positions have not been described during the past four years. Therefore, qualified personnel should be provided to establish and implement a job description program on a continuing basis.

Job descriptions provide a means of measuring performance, avoid duplications of responsibilities, and assure required functions and procedures are covered. Staffing the proposed position of job analyst will require an annual expenditure of $15,000.

2. Provide the Department of Personnel with complete, computerized data on civil service personnel.

All information regarding civil service employees is retained by the Civil Service Commission. The only data supplied to the Department of Personnel consists of names, addresses, and social security numbers. Thus, the department has no information regarding previous employment, educational background, skills, and the like.

At present, a hand-posted card is maintained on each employee by a group of 15 people. Of these, 10 are board employees and five are paid with federal funds.

Computerizing the personnel data would lower the staff requirement to seven. Implementation would provide an annual saving of $37,000 to the board and $18,000 to the federal government through personnel reductions.

3. Prepare manuals for civil service positions to ensure uniform procedures and aid in training new employees.

The only manuals now available are for school clerks and security officers. New employees for all other positions are given verbal instructions by incumbents or supervisors. This results in poor job procedures and incomplete training. The cost of preparing the manuals will be more than offset by improved job performance, lowered turnover, and reduced training requirements.

4. Prepare job evaluation guidelines for rating performance.

The present practice requires supervisors to grade employees as outstanding, excellent, good, fair, and unsatisfactory. It does not provide uniform standards for the raters. The existing uncertainty as to the importance of various factors leads to questionable evaluations. Therefore, guidelines similar to the following for job performance should be adopted:

- Outstanding—Far exceeds normal requirements for thoroughness, accuracy, promptness, and the like.
- Excellent—Above average in meeting requirements of thoroughness and accuracy. Work always prompt.
- Good—Satisfactory work is usually thorough, accurate, and prompt.

- Fair—Needs occasional prodding to complete work and to obtain accuracy.
- Unsatisfactory—Work generally below standard, late, inaccurate, and incomplete.

These proposed standards will guide supervisors in making numerical designations of the factors used in evaluating civil service employees. The principal benefit will be more equitable ratings. No additional cost is required.

5. Provide funds to implement the Administration Compensation Plan adopted by the board in March 1971.

Management by objectives, as provided under this plan, is a tool used in industry to measure administrative performance against previously established goals. To date, only the establishment of objectives and counseling parts of the program have been carried out. Lack of funds has caused the board to defer full implementation.

The total program will increase overall performance, reward the deserving, and improve morale. Implementation will require the addition of one clerical employee at an annual cost of $12,000 including fringes. It will also result in salary increases for some administrative personnel which cannot be estimated.

6. Replace temporary employees with civil service personnel.

Approximately 85 persons in salary grades 14 and above are full-time employees although employed on a "temporary hire" basis. As no examination has been given by the Civil Service Commission, many have held these jobs for years. Some were promoted from other grades, often with no experience or qualifications for the position.

There are also several hundred temporary employees such as school clerks, janitors, and the like on volume jobs. These situations are caused by a failure to give examinations or because the people on the available lists were not interested in taking the job. Since the positions must be filled, many possibly unqualified people are being used.

Utilization of temporary workers in this way undermines the purpose of the civil service system. Therefore, a monthly report should be provided to the general superintendent of all temporary employees.

Information should include names, positions, date of employment, and reason for hiring. The proposed review will result in a call for examinations for some positions and will reduce the number of noncivil service employees. Through examination, the board can be assured of qualified personnel.

7. Institute a salary adjustment program based on merit for all civil service employees.

Salary adjustments are granted upon completion of various periods of service. The poorer worker receives the same increases as does the superior one, resulting in an inequitable distribution of raises.

Therefore, increases within each salary grade should be based on performance. An employee rated as good would be granted increases annually until he reached the mid-point of his range. Subject to continued good performance, subsequent raises would be given each two years thereafter. Employees given an excellent or outstanding rating would receive annual increases until the range maximum was reached.

By relating total compensation, including base salary, working hours, vacations, retirement plans, group insurance, and the like, competitive practices would eliminate paying more or less than required to secure competent employees. Thus, $1.8-million per year will be saved by the Chicago school system. The savings have been claimed statewide.

8. Employ experienced personnel to head technical areas and fill administrative positions.

At present, many technical and administrative positions are filled by promoting certified principals. The people usually do not have qualifying backgrounds and must learn the field while on the assignment. This practice is costly for two reasons. First, there is the factor of a lengthy learning period. Second, in view of their being paid as principals, the salaries are in excess of those given experienced people in industry.

Employing only experienced personnel will provide long-term benefits through reduced training time, better qualified employees, and more realistic salary levels.

9. Establish a work measurement program.

No method exists to establish a proper work load for clerical jobs. Thus, it is virtually impossible to determine the manpower requirements.

Many companies employ consulting firms which specialize in work measurement programs. The consultant trains staff members in the various departments to study the job content of each position and relate each procedure to predetermined time requirements. Such programs have resulted in gradual staff reductions of 15% to 25% of the clerical payroll.

It is estimated that implementation would provide an overall reduction of 20% for an annual saving of

$8.2-million. The one-time cost is estimated at approximately $1.5-million.

10. Assign direct responsibility for subordinate's work performance to department heads.

Department heads, chief engineers, and other supervisory personnel report they have diminished control over their employees. This is because the employees feel that their protection under the Civil Service Code and board policy gives the supervisor little power beyond a verbal reprimand. Also, the time required to secure approval of a recommended suspension of an employee makes the supervisor feel the procedure is ineffective.

By granting the key supervisory staff authority to suspend employees for periods up to 30 days for insubordination, refusal to work, continued tardiness, and the like, control will be greatly improved. No savings are claimed although employee performance should improve.

11. Establish a formal grievance procedure for civil service employees.

Employees and supervisors are dissatisfied with the present informal procedure. The major complaint is the time lag from beginning to resolution of a grievance. The result is lowered morale. Providing a procedure with prescribed steps and time limitations will resolve employee problems in a more satisfactory manner.

12. Permit discharge of unsatisfactory employees upon recommendation of a supervisor with approval from the Department of Personnel, subject to appeal to the Civil Service Commission.

The board's rules state that no civil service employee may be discharged except for cause based on written charges by the general superintendent with board approval. Few employees are discharged, despite open refusals to conform to procedures or to obey their supervisors. This results in poor job performance and frustration of supervisors.

The State of Illnois program provides that employees may be discharged upon recommendation of the department head and the Director of Personnel. The employee retains the right to appeal within 30 days to the Civil Service Commission.

Implementation of such a policy will eliminate unsatisfactory employees and increase production. The annual saving through payroll reductions is estimated at $304,000.

13. Establish a compulsory retirement age of 65 for civil service employees.

Unlike certified personnel, civil service employees have no compulsory retirement age. As a result, many employees whose production is far below standard have remained on the payroll. To remedy this situation, a compulsory retirement age of 65 should be established. The program should be set up over a three-year period to reduce hardships on present personnel. The annual saving through payroll reductions cannot be estimated.

14. Eliminate the board rule which makes failure to pay on the part of an employee a just debt cause for dismissal.

The Bureau of Teacher Personnel receives an estimated 80 letters daily from merchants and collection agencies requesting assistance in collecting alleged debts of board employees. Also, the Bureau of Civil Service Personnel receives approximately 25 such letters per day.

Under current procedures, a clerk must determine if the person is employed. A form letter is then sent to the merchant and another to the employee. Finally, a notation is entered on the employee's personnel records. Three employees are engaged in this function on a part-time basis. Eliminating it will provide an annual saving of $9,000.

15. Initiate a program to communicate benefits to employees.

Employees often do not appreciate the benefits received from employers. Those provided board employees currently average 23% of the payroll, but no effort is made to inform personnel regarding the benefit program. Therefore, an on-going project to acquaint employees with the benefits offered should be initiated. The estimated annual cost is $25,000.

16. Modify the Chicago Civil Service Code to permit employees to be paid on an hourly basis for time actually worked.

Although lunchroom employees may put in six to eight hours on the job, they are actually working only four hours or less. Changing the civil service code would allow department heads to pay them on an hourly basis. At current employment levels, the annual saving to be realized would be approximately $1.59-million.

17. Engage professional employee relations experts and negotiators.

Presently, a committee of three board members handles negotiations with the Chicago Teachers Union.

The Director of the Bureau of Civil Service Personnel negotiates with 27 individual unions or associations representing approximately 12,000 civil service personnel.

Employee relations specialists, with backgrounds and experience in negotiations, who can keep abreast of labor regulations, potential union contentions, demands, as well as develop materials and arguments to counter them, would be more effective in dealing with professional union representatives.

18. Negotiate employee contract agreements to be effective for not less than two years.

While the term of most group contract agreements in the private sector is three years, school board contracts are of one-year duration. Such short-term agreements mean, in many instances, that the parties are constantly negotiating and faced with contract termination dates. These situations increase the possibility of strikes.

Adoption is recommended similar to a provision of the Postal Reorganization Act which provides that "collective bargaining agreements . . . shall be effective for not less than two years."

19. Make hospitalization-major medical coverages partially contributory.

Premium costs for hospitalization-major medical coverages were budgeted at $11.5-million for fiscal 1972. The recent increase in rates has raised the estimated cost to $16.5-million.

The board pays the full cost of $16.78 per month for single employees and $50.20 per month for employees with families. These benefits were negotiated by the union and no change can be made at present. However, in future negotiations, the board should attempt to attain union agreement to have some contributory arrangement by the employee.

20. Participate in a statewide single policy for group health and accident, major medical, and group life programs.

Group health and accident, major medical, and group life programs cost the Chicago school system about $11.5-million annually and are increasing. One policy, issued by a single carrier or a combination of carriers or one program administered by a statewide fund, should offer economies in acquisition, administration, and other retention costs.

Based on an estimated 10% reduction in premium costs, the Chicago schools would save $1.15-million annually. These savings have been included in the statewide report.

21. Offer group life insurance to employees in significant amounts in line with their duties, responsibilities, length of service, and compensation.

The group life insurance plan allows an employee to carry only $2,000 of life insurance. Such coverage should be increased to allow an employee to purchase larger amounts at group rates. Additional amounts should be based on duties and responsibilities of personnel as well as salary and length of service. However, the additional insurance premium would be borne by the employee.

22. Adopt a pay-as-you-go method for funding employer contributions to the teacher retirement plans.

Currently, the employer's contribution for the Chicago plan is from the city's Public School Teachers' Pension and Retirement Fund Tax and an allocation by the General Assembly from State Distributive Funds. In 1971, employer contributions for the Chicago fund were represented by local tax levies of $14.1-million. These sums can be reduced substantially by a pay-as-you-go method.

Under the proposed system, the employer would contribute annually the difference between the benefits paid out and employee contributions plus investment earnings. Savings for the Chicago fund would amount to $7-million and reduce the city's taxes by $3.1-million per year. These savings have been included in the statewide report.

23. Adopt investment policies currently followed by a majority of private pension and retirement funds.

Using a formula, including asset revaluation, supplied by a large metropolitan bank, the Chicago retirement fund has a cumulative rate of return for the five-year period from 1966 to 1971 of 2.67%. A survey, analyzing more than 350 large private pension funds, reported an average return of 6.72% for that same period. Therefore, the retirement fund should adopt an investment policy similar to that followed by the major private funds.

By earning a more normal return on investments, Chicago's contribution could be lowered by $7.4-million, of which $3.3-million would represent a reduction in taxes. The benefits to be derived are, however, contingent upon adoption of the pay-as-you-go plan which was suggested in a previous recommendation. The savings indicated are included in the statewide report.

Public Relations

The communications/community relations functions of the Chicago school system are administered by a central staff of seven persons headed by an assistant superintendent. This position reports to the General Superintendent, but is now vacant. Fiscal 1971 expenditures were about $99,000. Of this, $95,000 was allocated to salaries.

The central office is responsible for press, community, and public relations matters which involve the Chicago Board of Education, its administrative staff or overall school policy. Community relations activities have been delegated to three area and 27 district organizations. At the school level, this responsibility is vested in the principal.

The three area superintendents are assisted by community/human relations staffs which range from six to 12 persons including clerical help. Area personnel visit each school monthly to assess community tensions, suggest constructive programs, and prepare news releases for principals. They also function as a news source for community media.

In the area offices, the same individuals handle external community relations activities and internal personnel problems. Budgets cover salaries, but do not include program funds. Area staffs respond to community relations problems at the local level when requested. Speakers' bureaus provide discussion leaders for interested community groups.

EVALUATION

The importance of the Chicago school system and the controversial environment in which it operates makes it a prime subject of public interest. In view of this, the lack of a planned community relations program handicaps the board in its efforts to inform the public of the status of school operations. Limited liaison between the board and the administrative staff results in a community relations activity which operates on an emergency basis. Board of Education members and administrative personnel frequently find excessive amounts of their time centered in public disputes.

Several weaknesses hinder the community relations effort. They include:

- Lack of professional employees to administer the program.
- Absence of budget provisions for programming and planning.
- Understaffing in the department.

Performances of area staffs, judged by the effectiveness of the community councils, range from poor to excellent. The personnel, who have other duties, are limited by the lack of professional training. They receive only minimum guidance from the central office.

RECOMMENDATIONS

1. Organize the central office public relations staff to provide a positive communications program.

The Chicago school system presents an uncoordinated image in regard to its problems, accomplishments, and innovations. In many cases, conflicting statements emanate from school board members while still another viewpoint may be presented by the school administration. Too much of the present public relations activity is reactive rather than planned. Part of the problem is the existence of an understaffed, poorly administered public relations unit.

Increasing the responsibilities of the headquarters staff will permit development of an organized communications program. Implementation will require the addition of a director with demonstrated skills in community, press, and internal communications. He must be qualified to develop long-range programs and react to current events. In addition, he must have the ability to select and direct a staff of competent professionals.

The proposed additional staff should consist of the director and four communication specialists. The director would report to the General Superintendent. The proposed specialists would include:

- An assistant director.
- A specialist to provide liaison with individual board members.
- Another specialist to provide liaison with the area staffs.
- An assistant to organize and direct a comprehensive internal communications program.

In addition to improving community relations, this program should reduce the time spent by the administrative staff on controversial issues. It also will eliminate many costly changes in plans which now occur because of a lack of public support. The annual saving to be expected cannot be calculated, but should far exceed the anticipated cost.

Formulating goals, obtaining the necessary coordination, and developing the desired programs may require three to five years to achieve substantive improvements. The annual cost of implementation is estimated at $400,000.

2. Increase the area staffs.

The major thrust of the community relations effort has been at the area level. The staffs involved range from six to 12 persons including clerical and administrative personnel. Present employees are not trained to develop and carry out a comprehensive community relations program nor do they receive necessary professional and policy support from the central office.

The addition of one experienced professional to each area staff is needed to develop an effective decentralized community relations program on a 12-month basis. This person, while reporting to the area office, should receive functional support and guidance from the central staff. The annual cost is estimated at $55,000.

3. Initiate a comprehensive community relations program involving community councils, parent/teacher organizations, and other local groups to improve cooperation regarding vandalism and other associated matters.

Although good relations with various community groups are vital to the school system, not enough attention is paid to the interests of the schools on items such as vandalism and the like. Therefore, a definitive program should be established to enlist the aid of community organizations in solving such problems. The approach, using schools with good local relations as a model, should include goals, objectives, and proposed means of achieving them.

Implementation would reduce current time-consuming meetings with community groups and should improve the effectiveness of school board/community activities. Although savings cannot be quantified, vandalism is costing the school system more than $3-million annually. Therefore, any reduction of this problem should produce significant savings.

Purchasing and Warehousing

The organizational structure of the Bureau of Purchases in Chicago's public school system exemplifies a highly centralized materials management approach to procurement. It encompasses the functions of Specification Engineering, Data Processing Coordination, Buying, Materials Inspection and Test Laboratory, and the Division of Supplies. Trucking of goods to the schools is assigned to the Bureau of Transportation. The responsibilities of approximately 160 personnel in various functional areas are as follows:

- Specification Engineering. — This five-man section maintains and continuously updates some 30,000 complex commodity descriptions which are designed to precisely define board requirements with minimal reference to brand names.
- Data Processing Coordination. — It represents purchasing interests in the design of automated inventory management and purchase order issuance systems.
- Buying. — The bureau has 10 buyers including two assistant directors and about 50 supporting personnel. Requisitions are divided into commodity groupings and assigned to specific buyers who represent the board in contracts with some 3,500 suppliers. In 1971, the board spent about $60-million for purchased goods and services which required over 110,000 orders. During that period, only 179 purchases reached the board report level of $15,000. Few fall in the formal bid category of more than $2,500. The great bulk of the total orders are well below $2,500 or relate to textbooks and are not bid at all. Purchase of new construction, rehabilitation, and maintenance services are responsibilities of the Bureaus of Architecture and Plant Operation and Maintenance, respectively.
- Materials Inspection and Test Laboratory. — Purchasing has three analytical chemists who test coal and oil for BTU content. They also test swimming pool water and recommend appropriate treatment as well as perform other limited testing. Conversion from coal to gas is rapidly eliminating work of this section. However, an additional clerk was recently added to the staff.
- Division of Supplies. — Purchasing manages a large inventory of approximately $2-million in

4,000 stockkeeping units. Disbursements average $35,000 per day to fill about 1,000 orders with about four line items per requisition. Approximately 70 men are employed in handling the stock. Warehouse administration requires a staff of 21 employees even though most of the significant paperwork functions are prepared by the Data Processing Section at the central office.

EVALUATION

Two challenges often confront a large-scale government centralized purchasing organization such as the Bureau of Purchases. On one hand, the bureau must satisfy non-cost conscious requisitioners in the educational plants. On the other, it must fulfill legal requirements, demands of the various publics for sealed competitive bids, and satisfy a board which is vitally interested in cost and expects prior review of expenditures.

It is difficult to balance conflicting objectives and determine whether or not the bureau has done so. Requisitioners still complain of delays related to administrative procedures. Yet, they are shortcut by a subdivision of purchases out of the board's approval range and even below the formal bid range.

On annually bid repetitive items, the relatively low prices secured by the bureau compare favorably with unit prices paid in other Illinois school districts for like merchandise. On spot purchases, some relatively high prices are paid in Chicago as compared with those secured by industrial firms.

The manpower employed in the bureau, excluding the Book Requisitioning Section, appears excessive in the supporting staff, Specification Engineering, warehouse administration, and analytical chemist areas.

The nature of this study suggested a performance analysis from both a board level and requisitioner point of view with a policy orientation in searching for solutions to the problems. The policy changes recommended herewith are aimed toward attaining these results.

RECOMMENDATIONS

1. Realign responsibilities and relocate the staff of the Bureau of Purchases.

Delays occur in encumbering and processing many purchase requisitions at central board headquarters. Administrative procedures and multiple copy filing requirements for small purchases are complex and expensive. The benefits of accumulation and mass purchasing do not accrue often in the handling of most spot purchases because only one or a limited number of bids are secured. In contrast, repetitive contract items are effectively purchased on a centralized basis under annually established contracts.

To better serve the requisitioners in the schools, the Bureau of Purchases should be partially decentralized. Central Purchasing should retain only those transactions which usually are contracted for under systems-wide commodity contracts or require formal bid procedures.

A local buyer should be moved to each of the area offices to handle spot purchases under $2,500 without formal encumbrance procedures. The current direct purchases system which bypasses encumbrance, purchasing, and separated receiving report procedures should be utilized by the new area buyer. This will permit invoices related to local purchases to be directed through the area office, approved and forwarded for simultaneous, immediate encumbrance and payment. Informal records presently kept at schools should be relied on to keep expense below budgets. No additional personnel are required for decentralization.

Of the 113,235 purchase orders processed by the bureau in 1971, only 38,462 were non-textbook requisitions which take up the bulk of purchasing manpower. Of the 38,462 orders, approximately 12,000 were for highly repetitive items which are bought on annual contracts and then released from vendor stocks as schools require them. Repetitive purchases are being automated in data processing. Annual volume will grow to about 15,000 automated orders which would have obviated typing 40% of the orders placed in 1971.

Subtracting 15,000 contract release orders from 38,462 yields a residual group of approximately 23,000 requisitions processed as spot purchase orders. This 40-60 ratio of repetitive contract-type releases versus spot-purchases was corroborated by an analysis of some 4,000 orders enumerated for December 1971 which indicated:

- Most purchases are below $2,500.
- Only a handful of transactions, 179 in 1971, reached the $15,000 board report level.
- Regrouping of some spot purchase orders into more economical contract purchases is possible on a centralized basis.
- Approximately 60% of the spot purchases cover fencing, plumbing, yard repairs, spare parts, small one-time purchases, and the like which could be handled more expeditiously with less administrative expense on a decentralized basis.

Of the 50 personnel currently employed in the bureau excluding textbook requisitioning, only 20 would be required centrally. A total of nine people would be required in three area offices in a partially decentralized organization.

The Director of Purchases, assistant director, and the chief specification technician should take on an expanded commodity load. The concept of purchasing administrators doing some actual buying-work is quite common in industry. At each of three area offices, a small group consisting of one buyer and two clerk-typist assistants could each process 6,000 orders per year, if they extensively employ the direct purchases system and combination requisition-purchase order forms which usually obviate retyping each requisition.

A net reduction of 21 positions in the buying, specification writing, and supporting staffs resulting from the proposed partial decentralization is projected. At the central warehouse, comparable reductions should be made. The ratio of 21 administrative personnel to 70 stockhandlers is excessive.

No more than 11 management and staff personnel should be employed in a warehouse processing some 800,000 line items per year with inventory control almost entirely in data processing. As coal testing phases out, the three analytical chemist positions should be reduced and swimming pool testing contracted out. Implementation should provide an annual saving of $275,000.

2. Increase annualized purchase contracts by commodity groups.

Currently, commodity items which should be bought together are illogically separated. For example, a bid was let on 100,000 gallons of gasoline for board trucks followed by a second on 400,000 gallons for a contractor's buses. The board paid 6% more per gallon for the smaller lot.

In 1971, 12 board reports were prepared to cover separate awards for various forms of paper such as construction, offset, duplicator, towels, and the like. Six were required in floor care products including strippers, sealers, and finishes. Three separated fluorescent tubes, ballasts, and fixtures.

Because of uneconomical separation of logical groupings, over 100,000 balls and bats are purchased each year for over $200,000 in separate purchases. Only an item such as volley balls, an $18,000 per year expenditure, reached board report level. Bidding and reports should cover commodity groups, such as sporting goods or furniture, not elementary teacher desks followed by another report on high school teacher desks. Therefore, efforts should be made to:

- Focus central purchasing effort on increasing the number of commodities bid in logical commodity groups in annualized purchase contracts.
- Structure bids so that either the business can be split among several vendors or awarded to a single vendor as determined by the lowest cost for the commodity.
- Solicit an extra discount from vendors for receiving 100% of the business in a commodity group.

A separate provision in the bid documents should call for an extra discount, to be stipulated by the vendors, for receiving all of the items in a commodity group. Bids can be figured two ways; separate awards to the multiple vendors who bid low on particular items in the commodity group, or an overall award to a vendor who bids a lower overall total than the sum total of the low bids.

This improved bid structure would avoid situations where the board turned down lower bids because of inadequate bid structuring. A fleet purchase discount plan should be negotiated with major producers for the approximately 150 driver education cars, permitting credit card purchases at a discount at stations of the selected vendor.

3. Seek additional potential vendors and bidders in board purchases.

In 1971, only one acceptable bidder was found on a 20-automobile purchase, no competition was allowed on a $40,000 maintenance contract for typewriters, and competition was not sought on the purchase of $8,000 in drums. Therefore, departmental administration must increase the number of bidders in comparable transactions. In addition, if lower bids are judged to be lacking in quality and rejected, the difference in excellence should be documented and the higher purchase price justified on a cost-performance basis.

4. Expand the role of Central Purchasing in value analysis.

Hundreds of expenditures, listed monthly in various purchasing reports, do not conform with the board's cash-crisis position. For example:

- The Board of Education pays $1 extra per month on over 600 phones with touch-tone dialing.
- About $15,000 is spent each year for linen towels for administrators.
- Large quantities of supplies — 160,000 rolls of cellophane tape, 100,000 rolls of masking tape, and 95,000 scissors are given away each year.

- Just before 1971 ended, when the schools were scheduled to shut down for lack of funds, thousands of tape recorders, record players, TV sets, projectors, and hundreds of musical instruments were bought.

Questioning every aspect of thousands of small purchases cannot reasonably be expected of board members. This should be a staff responsibility. Having budget funds available is no justification for unnecessary or excessive expenditures. Therefore, Central Purchasing's staff should be required to evidence a posture of vigilant austerity. Consistent with the board's financial position, it should:

- Recommend items which should not be purchased without review.
- Investigate excessive usage of acceptable items.
- Call attention to excesses resulting from decentralized authority.
- Make purchasing a control point on unnecessary expenditures and determination of needed quality.

5. Prepare reports and forecasts which reflect actual performance of the Bureau of Purchasing.

Current reports do not compare Chicago prices with those of other school systems and no forecast is regularly made to optimize inventory. Therefore, two reports should be prepared.

The first is an annual economic review. By November 1 of each year, formally forecast the trend in unit prices for the 100 most significant centrally purchased items. Optimize year-end inventories, by placing or deferring purchases, as indicated by price projections. Inventory value of $2-million in 4,000 different items, with some $750,000 in monthly disbursements, permit flexibility in the stock level without changing the overall inventory value.

Second would be the annual comparative price report. Early each year, report Chicago prices for the 100 most significant commodities versus those paid by other large school systems. Publication of these reports would help offset current unfavorable publicity regarding purchasing practices.

School Food Service Programs

Lunchrooms in the Chicago public schools serve more than 75-million customers annually. There are approximately 3,750 persons employed by the Bureau of Lunchrooms. Gross revenue for 1971, including state and federal subsidies were approximately $32-million. Federal commodities worth about $2-million are received annually for lunch programs. Gross revenues for 1972 are estimated at $40-million.

At present, funds are running well ahead of expenditures. This is principally due to the serving of a Nutra-Pak cold box lunch in 170 locations. The cost/subsidy margin for this type of lunch offsets losses in most other modes including teacher meals.

Control of lunchroom operations is vested in a director and one assistant. Three staff groups, with a personnel total of 15, are responsible for government commodities, monthly subsidy reimbursement forms, lunchroom equipment layout, and design. Each of the more than 500 local operations has a manager or lead employee.

A district office is maintained for approximately every 45 lunchrooms. These offices are staffed by a district supervisor supported by a coordinator and a secretary. Personnel matters are usually handled by the coordinators. These employees also control 11 labor pools consisting of 17 persons in each who are assigned on a daily basis to cover absences. The Bureau of Lunchrooms is essentially a line organization with little staff or planning personnel.

The most significant influence on the Chicago lunchroom program has been the rapid increase in state and federal funding over the past three years. In 1968, subsidies were under $1.5-million. They total an estimated $22-million for the current school year. Thus, local level appropriations have become unnecessary and the 1972 budget was able to include $1-million for ancillary costs previously taken from the educational fund.

The element which determines the extent of the subsidy cost for the lunchroom program is the criteria used for free meal authorizations. Currently, some 70% of the meals served are authorized as free. Lunches as well as some breakfasts are provided to all children on ADC and to those from families making less than specified income guidelines. Family income determination is a responsibility of the school principal. However, there is no adequate method for validating information.

There are seven modes of lunch preparations and presentation used in the Chicago public schools. They include:

- Milk Only — There are 78 schools without lunchrooms which provide for the purchase of milk by students. Sales are handled by teachers' aides.
- Nutra-Pak — A cold box lunch is assembled from purchased components in a central kitchen and transported to 170 school locations. Usually, a lunchroom attendant distributes the meals for consumption in classrooms or other nondining room situations. Assembly personnel turn out more than 100 lunches per manhour, making the central kitchen a model for meritorious productivity. No machinery is involved, only motivated and effectively supervised employees are used.
- Mobile Hot Food Services (MHFS) — At 22 high schools, lunchroom personnel prepare entrees, vegetables, and the like in bulk form. Contract haulers pick up the airtight transportation containers and deliver them to 43 elementary schools. Items are reheated in steam tables and served with milk. Some on-site preparation is done at a few schools, usually for teachers. The average number of lunchroom employees involved is four.
- Steam Cookery with Convenience Entrees (CSC) — This is an experimental program being tested at one elementary school. It utilizes pressure cookers in lieu of ranges and convection ovens as well as precooked entrees to minimize on-site preparation costs. There are seven lunchroom employees. Some new schools use steam cookery, but not precooked entrees.
- Prepackaged Convenience Meals (PCM) — This is a new program being conducted at 11 elementary schools. Manufactured meals packaged in a single foil tray are reheated in convection ovens. Equipment requirements are minimal and vendor-supplied. Approximately four lunchroom employees are required per school.
- Full-Kitchen Cookery, Single Entree Presentation — At 225 pre-kindergarten to grade 8 facilities, a maximum of raw ingredients and a minimum of convenience foods are used to prepare a single menu plan daily. On-site baking reduces purchased food costs, but adds significantly to labor needs. Food preparation which includes many manual operations is very inefficient.

  Excessive numbers of lunchroom personnel were evident in nearly all of the schools visited. Although labor requirements are at their peak during the noon serving and cleanup hours, few part-time, temporary employees are used in full-kitchen schools. Proportional reductions in hours worked are not permitted and staff levels are not reduced when the number of customers declines each spring.

  A wide variation in efficiency exists among the 225 kitchens, but this is not attributable to equipment layout problems. The quality and quantity of food was also very uneven and substantial amounts remain uneaten. The average number of employees is slightly more than seven in full-kitchen operations.
- Full-Kitchen Cookery, Ala-Carte Presentation — At 65 general or vocational high schools and branches, a median of 25 employees per lunchroom are engaged in a broad range of excellent quality commercial style cookery. Food quality, choices, and presentation make this program expensive, but appropriate for students approaching adulthood. The recent practice in certain areas of students refusing to self-bus dishware has added significantly to manpower expenditures.

  Since neither the $0.40 student charge nor the $0.55 teacher cost covers even direct expenses, most high school lunchrooms lose money even without allocating overhead expenses to the operation. As in elementary schools, a maximum of hand-prepared raw ingredients and a minimum of convenience foods are used. Personnel inefficiencies found at the elementary level are present in even larger measure in the high school kitchens.

The first step in the overall project involved an effort to seek out and feed every needy child. This has now been done and almost 40-million free lunches are provided annually at more than 500 schools. The second phase, a free breakfast and lunch program for all children regardless of need, is strongly urged by the Director of Lunchrooms. The final step would involve free food service to needy adults and all elderly persons in a school-community neighborhood. Both approval and funding are required for the second and third phases of the program.

If a state and federal subsidy increase of $78-million per year is approved, the Bureau of Lunchrooms will put its recommended universal free breakfast and lunch program into effect. This will bring Chicago's lunchroom expenses to a total of about $100-million annually.

EVALUATION

Although the Bureau of Lunchrooms is successfully seeking out and feeding needy children, attention must be given to the elimination of waste, reduction of excessive lunchroom personnel, and lowering of manhour costs involved in school cooking operations.

At present, the bureau has no planning staff. As a result, definitive cost analyses are not available regarding alternative food preparation and presentation modes. Consequently, overall lunchroom policies are not founded on a cost versus benefit relationship. In the absence of such analyses and policies, the Bureau of Lunchrooms is installing excessively expensive modes of operation.

Authority within the bureau is overly centralized, resulting in unmanageable spans of control at the director and district supervisor levels. Long-range planning is inadequate and short-range objectives, in the form of an annual budget, are not based on sufficiently detailed data. For example, the 1972 budget statement lumps together more than 500 operating locations and $40-million in expenditures. In addition, this summary budget is not built or predicated upon supporting documentation on a lunchroom-by-lunchroom basis.

Management reporting consists of masses of computer output and manual lunchroom operating statements which are prepared monthly. None of this information is presented in a form which results in effective management action. In addition, lunchroom statements are not analyzed by the auditors to pinpoint exceptions. Statistical cost control parameters are missing and the audit program is financial in nature, ignoring management aspects of the system's food service practices.

At the individual lunchroom level, few managers prepare written work schedules for employees. There is no cost control system to identify the payroll manhours involved in each of the production functions of cooking, baking, pot washing, and the like to output units of productivity. Consequently, overstaffing was evident in almost every location visited by the task force.

To carry out an effective centrally formulated lunchroom program, Chicago must establish a new organizational structure which would include decentralization of lunchroom operations. An innovative food service program is needed to reduce excessive costs in the elementary schools. Changes are also required in the areas of planning, accounting, auditing, free meal authorizations, food and equipment purchasing, warehousing, distribution, food preparation, and display. Potential savings of more than $10-million annually could be realized by making the necessary improvements.

RECOMMENDATIONS

1. Decentralize the Bureau of Lunchrooms.

The Director of Lunchrooms cannot effectively supervise 11 lunchroom districts without adequate planning staff support. In addition, the district supervisors must direct 45 locations each, representing an excessive span of control. Clerical inefficiencies exist in all of the districts. Therefore, a reorganization is recommended to accomplish the following:

- Improve span of supervisory responsibility and authority.
- Provide experienced planning personnel for the bureau.
- Place day-to-day control of lunchroom operations at the school level.
- Retain the benefits of centralized lunch program formulation, food production, and control procedures.

To achieve this, it will be necessary to prepare a framework of policies and procedures to support the decentralization program. Several subsequent recommendations have been made regarding service programs, operating standards, and reporting and control procedures.

Decentralization will require establishment of three area director positions to replace two assistant directors now authorized. The new positions will report to the area association superintendents. The 11 field offices should be closed and 33 district supervisors, coordinators, and clerk/typists organized into three area offices. The existing labor pool of 160 people should be reduced by 50%.

The recommended staff will include four line supervisors, three senior staff positions — supply, personnel, and planning/cost control — plus a clerk/typist in each office. Current salary ranges — $10,000 to $12,000 for coordinators, $17,000 to $19,000 for district supervisors, and $20,000 to $25,000 for assistant directors — are appropriate for the new line, staff, and area director positions.

The Director of Lunchrooms and his staff will retain responsibility for formulating systemwide programs, managing the central kitchens, and designing major new facilities or renovations. This group will also handle government reimbursement claims and disbursement of surplus commodities. A strong functional relationship must be maintained between the Director of Lunchrooms and the area directors. A senior staff position should be established in the area of planning and analytical studies to focus on central kitchen costs and coordinate cost control efforts in the area offices.

A development period of one year will be necessary for implementation. Thereafter, a pilot program should be established to evaluate a final decentralization phase. This would involve having high school lunchroom personnel report directly to each principal. An appropriate training program for principals and lunchroom managers must precede the program. The total annual saving to be realized through decentralization is estimated at $214,000. The annual cost of an additional area director and two staff personnel will be $52,000. Therefore, the net annual saving will be $162,000.

2. Adopt a Fully Equal Food Service Program in all pre-kindergarten to grade 8 schools.

Chicago now offers five modes of lunchroom service in pre-kindergarten to grade 8 schools. Each meets federal requirements, but costs differ by $10.9-million annually at the current level of 37-million elementary school lunches per year. If the proposed free breakfast and lunch program is approved, the number of lunches will increase to 60-million annually. At that serving level, the cost difference between modes will approximate $16-million per year. The varying levels are shown in the table below.

COMPARATIVE LOSS OR SAVINGS — CHICAGO ELEMENTARY SCHOOL LUNCH PROGRAM
(Applies if only one mode were adopted for all pre-kindergarten to grade 8 schools)

	37-Million Lunches Per Year		60-Million Lunches Per Year	
Mode	**Total Cost**	**Potential Annual Loss or Savings**	**Total Cost**	**Potential Annual Loss or Savings**
MHFS (mobile hot food)	$ 26-million	Loss of $3.2-million	$40.6-million	Loss of $5.2-million
CSC (steam cooking—convenience entrees)	$23.7-million	Loss of $500,000	$36.8-million	Loss of $1.4-million
Full Kitchen (average efficiency)	$22.8-million	Zero (Base Case)	$35.4-million	Zero (Base Case)
PCM (pre-packaged convenience meals)	$18.1-million	Save $4.7-million	$29.3-million	Save $6.1-million
Nutra-Pak (cold box lunch)	$15.1-million	Save $7.7-million	$24.6-million	Save $10.8-million

The Bureau of Lunchrooms is in the process of changing from the multiple-mode system to 500 full kitchens in the pre-kindergarten to grade 8 locations. This policy of installing small inefficient kitchens should be abandoned. The bureau should adopt a Fully Equal Food Service Program in its place. This approach offers a menu plan consisting of 60% prepackaged convenience meals (Improved PCM) and 40% cold box lunches (Improved Nutra-Pak) each week. The full kitchen service would be available only at the high school level. At a serving level of 60-million meals, adoption of the proposed program will provide an annual saving of $8-million.

3. Improve the variety of Prepackaged Convenience Meals and Nutra-Pak modes to enhance the acceptability of the proposed Fully Equal Food Service Program.

Although cost is an important factor in school lunch programs, the needs and reactions of the children must be considered in evaluating various lunchroom modes. Although the present Nutra-Pak and PCM lunches meet all federal requirements, they need upgrading to enhance their appeal to the children. Savings of more than $200-million over a period of 20 years, as outlined in another recommendation, can be realized with adoption of the Fully Equal Food Service Program. However, the recommended PCM and Nutra-Pak modes must be improved to ensure an appealing lunch program.

Nutra-Pak lunches use only six varieties of lunch meats. Items such as roast beef, chipped beef, breaded chicken parts, turkey and chicken slices, mock chicken, and peanut butter and jelly would add to the appeal of a box lunch. The extra cost could be eliminated by substituting a gelatin cup produced in the central kitchen, a box of raisins or the like for the overly expensive fruit cup now provided. In addition, the Nutra-Pak assembly room must be improved. It should be moved to a remodeled area on the first floor and air-conditioned to reduce bacterial growth during production periods.

Two changes are needed in the PCM meals. First, dual-pak systems should be used to separate hot entrees and cold desserts. The present single-pak requires heating of what should be cold foods and substantially reduces the menu appeal. It may also affect fruit textures.

At present, partially defatted beef fatty tissue is used in some PCM lunches. This material is not recommended as a meat extender because of bacterial changes which occur during its manufacture. Test kitchen efforts should focus on survey reactions of children to various types of meals. Finally, the combination of two different modes—serving a box lunch twice a week and the PCM mode the remaining three days will add new dimensions of appealing variety for all children, enhancing the acceptability of both modes of luncheon service.

4. Cancel all service changes to higher cost modes scheduled for pre-kindergarten to grade 8 schools as well as additions to high school kitchens planned in support of mobile hot food service (MHFS).

If the recommendation for a Fully Equal Food Service Program is adopted, adjustments in regard to full kitchen and MHFS will be unnecessary. Equipment requirements to switch from the Nutra-Pak to the MHFS mode typically cost $10,000 per school while a further change to the full kitchen facility means another $10,000. A total of 208 installations are contemplated at the elementary level. MHFS changes are planned at the high school level. Therefore, at the current level of proposed service changes, a total one-time saving of approximately $4.4-million could be realized.

5. Authorize the establishment of three food manufacturing plants and consider contracting for construction and operation with an appropriate supplier.

The proposed Fully Equal Food Service Program requires large volume food preparation, assembly, and packaging operations. It is estimated that three plants will be needed to provide 60-million meals annually. The first production facility should have a capacity of 60,000 PCM and 40,000 Nutra-Pak lunches per day.

A study of distribution logistics should be made to determine locations of the second and third plants. The proposed production system would begin with raw food stuffs including government surplus commodities. The facilities will not be simply assembly plants for convenience foods.

The plants should be managed by graduate engineers with industrial food processing rather than restaurant backgrounds. The proposed salary range is from $20,000 to $25,000 annually. Engineering and architectural design awards should also be made on the basis of experience with large-scale food processing operations.

Facilities will require cooking vessels capable of holding approximately one ton of food per batch each. This is far beyond the scale of even the very largest commercial restaurant equipment.

The estimated capital cost for the first facility will be approximately $800,000. The second and third plants will be approximately $1.5-million each if separated from present freezer and warehouse facilities.

Food storage and heating equipment in 208 locations without lunchrooms plus trucks will require an additional $1-million in capital funds. Since the proposed in-school equipment would cost approximately $5,000 for each location while full kitchens require an outlay of $20,000, implementation in conjunction with the prior recommendations will include a one-time capital outlay of only $430,000.

If the board cannot meet this expenditure, it may wish to consider entering a long-term contract with an appropriate supplier to build and manage the necessary facilities. If a contract is agreed to, the plans should be completely dedicated to school lunch production with inspection of PCM areas provided by board personnel. Provisions should also be made for the use of donated commodities and coordination of PCM manufacturing with Nutra-Pak production and distribution.

6. Contract for the management of lunchroom operations in newly constructed high schools and existing facilities whenever feasible.

The management and operations areas of high school lunchrooms are losing money. As civil service salary levels, food, and equipment costs increase, it will become impossible for the board to reach a break-even point by raising lunchroom prices. Therefore, these operations should be turned over to a professional management group on a contract basis.

Implementation would provide the following five benefits:

- Reduce food costs by an estimated 0.5%.
- Lower hourly labor rates by 10%.
- Improve administrative expenditure levels in test kitchen, menu planning, and purchasing areas.
- Lower equipment costs by more than 10%.
- Eliminate the need for central lunchroom administrators if implemented at all high schools.

The annual saving to be realized by contracting for lunchroom management and operation is estimated at $500,000.

7. Substitute teachers' aides for lunchroom personnel in the pre-kindergarten to grade 8 schools.

The need for lunchroom personnel will be substantially reduced by the proposed PCM/Nutra-Pak lunch program. The average number of employees in the 225 full kitchen schools should drop from an average of seven to two per school. More significantly, manhours per worker will be reduced from six to less than three. In addition, the gap between breakfast and lunch will not be filled with meaningless lunchroom work.

The serving of PCM and Nutra-Pak lunches requires little training and is almost in the same category as serving milk in "milk only" schools. Teachers' aides are used to handle milk serving in many instances. If they were used to serve the simplified lunches, 900 aides of the current 3,000 would devote an average of three hours daily to the program including breakfasts.

Implementation will enhance children/aide relationships and enrich the job content of these positions. The annual saving to be realized through substituting teachers' aides for lunchroom personnel is estimated at $2-million.

8. Charge current high school lunchroom users for a fair share of facility depreciation and overhead.

High school meal prices for both students and teachers should be increased to provide a breakeven return on a full-cost basis. In particular, teacher lunches should be raised from $0.55 and $0.85 to $0.70 and $1. Student lunches should be raised from $0.40 to $0.50. Ala-carte prices should be raised proportionately. The proposed full-cost basis would include a 5% annual charge on capital equipment.

Prices would also cover central warehousing, trucking, personnel training, and area supervision costs. Aggregate overhead charges to high school approximate $1-million per year. Implementation would provide an annual income of $1-million at the recommended price levels.

9. Improve operating procedures in high school lunchrooms.

Excessive personnel, estimated at a total of one-sixth of present manhours, were observed in all high school lunchrooms surveyed. A maximum of hand preparation and a minimum use of convenience foods were also noted. Few lunchroom managers prepare daily work schedules and no cost control data exist to relate payroll manhours to specific tasks.

Management reports are three months out of date and do not provide information with which to judge relative lunchroom efficiency. Therefore, the following management practices should be initiated:

- Utilize a maximum number of convenience entrees prepared in the proposed food manufacturing plants.
- Create a mechanized production/cost control system to allow meaningful comparisons to be drawn between workers, cost levels, and lunchroom operations.
- Employ more three-hour workers for serving and clean-up.
- Reduce employment levels on or about May 1 when the number of customers declines.
- Redesign operating statements to provide data on production versus manhours.

Implementation should increase lunchroom efficiency and reduce labor costs for an annual saving of about $1.02-million.

10. Eliminate abuse of free meal authorization practices.

State and federal cash subsidies have increased from less than $1.5-million to $22-million annually in a three-year period. This rapid growth is not due to any substantial change in the number of needy students. It appears to be the result of inadequate administrative procedures in authorizing an annual expenditure of up to $170 per child.

To correct existing abuses in the system, additional state auditing personnel should be hired. They would have the authority to withhold state and federal reimbursements from the school system until corrections were made. Further, the state auditors should require assignment of a social security number to each child. These numbers would then be correlated with those of other family members by the State Department of Revenue.

11. Establish effective management and cost control reporting.

Current accounting procedures are incomplete and do not reflect all costs associated with the program. Head count records provide the necessary information for filing state and federal claims, but have insufficient data for accurate cost and budget control. The units prepare a simple profit and loss statement. However, this report is normally on a district-wide basis and does not highlight potential problems within an individual school.

A true profit and loss statement would include all expense and income items on a monthly basis for each kitchen. This would provide a timely report for effective control of the food service operation.

Prepared monthly, it would give the food service and school administrators a tool for control, evaluation, and corrective action. Implementation will provide an annual saving of between 1% and 4% of the total expenditure through improved cost control. A saving of 1% would amount to $253,000 per year.

12. Establish job descriptions for all food service personnel.

Few schools have formal job descriptions for cafeteria managers or other food service personnel. Without them, qualifications for such personnel are hard to establish. In addition, performance evaluations are difficult to administer objectively.

Therefore, job description files should be developed for all food service functions to outline duties, responsibilities, and reporting relationships. The cafeteria manager should be a competent administrator and experienced in the following areas.

- Personnel relations.
- Food and labor cost control.
- Inventory control procedures.

- Equipment utilization.
- Communication with administration.
- Food production schedules.
- Kitchen layout.
- New methods development.
- Training program administrators.

Implementation would upgrade the quality of cafeteria management and food service personnel. This would have a direct effect on the total operating expense of the program. However, no dollar figure can be established at this time.

Textbooks

Textbooks, library books, and other related materials were funded on an $0.08 per $100 assessed valuation in 1971 and $0.11 per $100 in 1972. The Chicago schools have a rent-free textbook system with a 1972 budget of approximately $11.5-million. Expenditures are allocated on a per-pupil basis by grade or level.

Amounts range from $2.20 for kindergarten to $18.70 for grade 12. An additional allocation is made for special education. Funds vary by division, ranging from $165 to $343.75 per pupil. Approximately 3% of the textbook allotment is deducted for postage and transportation costs. During the 1971-1972 school year, the definition of textbooks was expanded to include such aids as filmstrips, maps, charts, records, and the like.

Purchases of text material are handled on a four-year bidding cycle. Samples of the materials which are bid, are evaluated by a committee consisting of principals, teachers, and high school level pupils. This committee meets for several weeks every summer. Rejected materials are returned to the suppliers. Approved items are housed at 31st and Kedzie for reference.

Catalogs are published by discipline, separating textual from nontextual material. In 1971, 17 catalogs were printed. It is general practice to assume a four-year life cycle on textbooks. In 1971, approximately 93,000 purchase orders were issued for educational materials.

Bids are also sent out for rebinding and removal of discarded educational material. The 1972 price to remove and destroy used textbooks is $15 per ton. In practice, almost no textbooks are rebound. In elementary schools, textbooks are usually inventoried in the classrooms. In upper grade centers and high schools, texts are returned to bookrooms at the year's end. Some schools collect money for damaged or lost books.

Basic texts are determined by department heads or chairmen of curricula. Vendors send samples directly to the schools and may be asked to give presentations to the teachers. Upon this basis, the books are evaluated and voted on for acceptance. All schools visited used this process.

EVALUATION

Chicago's free textbook approach passes the cost on to all taxpayers rather than to the group using the material. The result is a lack of responsibility in the care of books by students. Although renting textbooks is against board policy, one school in a low-income area did so to raise school funds. Apparently, economic contribution could be possible at all income levels.

Allotments of funds are not updated to reflect changing school populations, causing inequities within the system. Setting aside 3% of the education material funds for postage and transporation is a good practice. Most schools keep ledgers to record expenditures because the monthly printout on purchases is not current enough to prevent overspending. The report is used as a check on ledger balances and to prevent incorrect charges.

The four-year ordering cycle forces many schools to replace books unnecessarily. All schools were ready to spend the additional money generated by the tax increase to cover nontext materials. Evidently, when these items were included in general fund appropriations, closer control held down such purchases. Separate catalogs for text and nontext materials are an excessive listing.

Inventory procedures varied at each school and a standard procedure is needed. In many schools, it was not possible to determine how many texts were assigned to the facility. If the student population changes, no transfer of material is possible other than sending discards from the sending to receiving school.

If the schools utilized a uniform purchasing system, text materials could be moved to other locations when necessary. A system-wide policy to enforce collection of money for lost or damaged books is also needed.

RECOMMENDATIONS

1. Place all audio-visual hardware in burglarproof storage.

Theft at some schools is a major expense due to the lack of good security areas. No school should be allowed to use expensive audio-visual equipment without providing burglarproof storage.

The Bureau of Plant Operation and Maintenance estimates that $205,000 of audio-visual equipment was lost due to vandalism, burglary or theft in 1971. The one-time cost of constructing storage areas for 200 schools would be $600,000. The annual saving to be achieved through implementation will be at least $205,000.

2. Establish a standard inventory procedure for text and nontext materials at each school.

There is no standard inventory method established for text and nontext material stored at the school level. An inventory record should be established for each item. A cumulative list of books assigned to teachers and/or departments should also be prepared. Cards could be used at the student, teacher, and/or department level to identify materials. A card-filing system would be needed to record total text and nontext materials at the school. Purchases and transfer materials should be added to the record while losses, discards, and items sent to other schools would be subtracted. At least one physical inventory should be taken annually. Savings would be generated through adequate inventory controls to avoid unnecessary purchase and promote material exchanges between schools. This standard inventory adoption should be a good business practice when properly administered.

3. Establish an inventory control for instructional materials at the district level.

No inventory controls are maintained on textbooks at the district level. Therefore, a record of each school's accumulated inventory should be established in the district office. A quarterly report should be made to the office indicating the type and quantity of textbooks not being utilized so transfer to other schools would be possible. Implementation will make it possible to identify items available for transfer and establish material control responsibility. Excess ordering and losses can be monitored.

4. Utilize teacher evaluations of instructional materials.

Evaluations of instructional materials done during the school year are not available to teachers in other Chicago schools or to the annual evaluation committee. By establishing a standard report form, it would be possible to circulate each review.

The reports should be accumulated by the Department of Curriculum. Benefits would include the contribution of useful information to the annual evaluation committee and development of a list of educational materials shown to be poor in usage.

5. Eliminate text and nontext catalogs.

The present set of 29 catalogs listing all approved educational materials is too extensive and expensive to maintain. The catalogs are used to identify approved items as well as their Chicago order number, supplier number, and price. In many cases, orders are delayed until publication of a catalog to learn if items are approved.

It should only be necessary to list accepted suppliers, approved item numbers, and the discount rate. Other information can be obtained from suppliers. Last year, 17 catalogs were published at a cost of $68,000. A single list can provide all necessary information at a much earlier date for under $5,000. The annual saving will be $63,000.

6. Establish expenditure accounting for educational materials.

There is no breakdown of expenditures by discipline and type of material for each school and the total system. Accounts should be established for each subject showing expenditures for books, hardware, software, freight, and any other subdivision which may aid in analyzing costs. Implementation will aid in the control of expenditures.

7. Replace textbooks based on their physical usability or educational value.

Texts are replaced every four years because of the evaluation cycle although the books are still good from an educational viewpoint. Replacement should only be necessary when texts are physically worn out or educationally outdated.

Curriculum evaluation teams should determine when current books are of no educational value and need updating. This system would require some replacements in less than four years. However, there should be a 5% to 10% reduction in the overall replacement cycle. Since 1971 expenditures totaled $10-million, a 5% reduction would provide an annual saving of $500,000.

8. Initiate textbook fund reallocations quarterly based on student population changes.

Some schools have significant population changes during the year. This causes inequities in the per-capita allotment. Schools with shortages seek additional funds while those with overages spend them. Therefore, budgets based on per-capita allotments should be adjusted quarterly by district superintendents to keep them current with enrollments.

This practice will allow schools to spend monies based on current enrollment figures. Also, it will allow book transfers from schools with shrinking populations to those with growing ones.

9. Increase the current usage of paperback textbooks.

Text costs are rising and by using paperbacks, expenditures can be reduced. Some publishers charge the same price for paperback and hardback textbooks. When this occurs, it is generally due to short print runs for paperbacks.

The situation can be reversed by increasing the demand for paperbacks. A 10% increase in their use would generate an annual saving of $15,000 for the first year. The amount would increase as usage grew and the cost of production declined.

This proposal has been made on a statewide basis, but benefits applicable to the Chicago school system are illustrated here.

10. Establish a policy to collect monies from students for lost or damaged educational materials.

Some schools collect money for lost or damaged books, but many are not able to do so. A board policy should be established which would freeze a student's records until debts incurred were paid.

This policy would not hinder graduation, but would prevent report cards or student records from being sent to prospective employers or to colleges and universities.

In schools visited, lost or damaged materials varied from zero to 10% of annual textbook purchases. No records were available to estimate how much money was uncollectible. If only 0.5% of the annual purchases represented uncollectible losses, the income would be $50,000 based on 1971 expenditures of $10-million.

11. Combine the Bureau of Instructional Materials with the Department of Curriculum and eliminate warehouse samples of instructional materials.

An excessively large collection of educational samples is maintained in a warehouse by the Bureau of Instructional Materials. However, the items are not being used. Principals indicated they could not spare teachers during school hours for evaluation visits and teachers are unwilling to go on their own time. Most schools in the Chicago system simply contact the suppliers for samples.

Since materials are readily available from a number of sources, the Bureau of Instructional Materials should be merged with the Department of Curriculum and the warehouse space freed. Administrative savings, including elimination of an assistant director and a coordinator, will be $65,000. Release of the warehouse space will provide a saving of close to $21,000 per year. The total annual saving to be realized through implementation will be approximately $86,000.

12. Combine educational material evaluations with curriculum revisions.

At present, all materials available in a particular discipline are reviewed and evaluated. The number of items approved far exceeds the materials purchased at the school level according to district interviews. The approved textual and nontextual list should consist of only basic and supplementary materials needed to teach the curriculum.

Items ordered beyond the approved curriculum list should be selected by teachers, committees or department heads at the school. These materials should then be approved by the school principal and district superintendent. These persons would be accountable to the community or local board should a question of educational value or waste arise.

Evaluation teams consist of students, teachers, and principals. In 1971, the total cost for this activity was $95,000. The budgeted expenditure for 1972 is $47,500 because principals will no longer be paid for their participation since they are now on a 12-month salary year.

By combining the evaluations with curriculum reviews, at least 50% of the actual 1971 costs could be saved. The annual saving to be realized through implementation will be approximately $48,000.

13. Establish use and verification of charges on bills of lading and postage rates for educational materials.

There is no verification of use or charges on bills of lading and postage rates for educational materials. This should be done on all invoices for educational materials before payment.

Implementation will avoid overcharges for transportation. It will also allow data collection so that transportation charges can be budgeted as a textbook cost.

Library Books

Library books, textbooks, and other related educational materials were funded on an $0.08 per $100 assessed valuation in 1971 and $0.11 in 1972. In addition to this tax levy, other funds are raised which contribute to the total allocation. This amounted to $3.88 per pupil in 1971 and $4.95 in 1972.

The 1972 figure represents approximately $2.8-million in expenditures. An additional allocation is made for special education, ranging from $60.50 to $99 per pupil. All libraries spend their full appropriation in order not to lose it. Libraries are allowed to spend 50% of their funds for nonprinted materials. This permits schools to bolster their collection of audio-visual materials.

The Annual Library Inventory recorded a total of 979,805 high school books and more than 1.2-million elementary texts. There are also 271,641 assorted periodicals, microfilms, pamphlets, filmstrips, recordings, tapes, transparencies, kits, and audio-visual materials in the high schools. Elementary schools have 514,209 such items. Some 6,000 books are on loan from Chicago Public Library to elementary schools.

At present, there are 144 professional librarians and 93 library clerks at the high school level and 604 full-time librarians and 10 library clerks in the elementary schools. Each library stocks books autonomously, taking into account requests by faculty, students, and the community.

All librarians keep weekly records on the circulation of books and audio-visual materials. They also take an annual inventory which is submitted to the Division of Libraries at the Board of Educaton.

Purchases on the elementary level are done through a computer tape listing the books a broker has available with prices and order numbers. Bids include the cost of the book and catalog cards. A catalog is published using the tape and forms the basis for ordering elementary library books. Books not on the list may be purchased with the principal's and district superintendent's approval.

High schools order library books from standard published listings using purchase orders. Workslips are submitted to the Division of Libraries where sets of catalog cards are prepared and forwarded to the school. In 1971, approximately 40,180 catalog sets were prepared.

Many schools collect funds for lost or damaged books. The rebinding of library books is done on a bidding system and the total cost includes pickup and delivery service.

EVALUATION

The libraries follow the traditional practices of keeping abreast of inventory and circulation. Allotments of funds per school are not updated to redistribute monies according to apportionments. In addition, minimum library material requirements are not established for new schools.

The automatic purchasing system used by elementary schools is excellent. Also, the high school purchasing system is satisfactory considering the wide selection available. There is no system to monitor the cost of elementary books to be sure the board receives the best price. A uniform procedure or method is needed to enforce collections for lost or damaged material.

RECOMMENDATIONS

1. Place all audio-visual hardware in burglarproof storage.

Theft at some schools is a major expense due to the lack of secure storage areas. No school should be allowed to have expensive audio-visual equipment without burglarproof storage. The cost of constructing security areas and the savings involved have been claimed in the report on Textbooks.

2. Make library fund reallocations quarterly based on student population changes at each school.

Some schools have significant population changes during the year. These changes require adjustments in expenditures based on the per-capita allotment. Therefore, school budgets based on per-capita allotments should be adjusted quarterly by district superintendents to keep expenditures current with student enrollments.

This practice will allow school libraries to spend monies based on current figures. Also, it will permit book transfers from schools with shrinking populations to those with growing enrollments.

3. Discontinue rebinding library books.

In 1970-1971, approximately 6,750 books were rebound at an annual cost of $12,500. This amounts to an average of 10 to 12 books per school. Such a small volume is uneconomical to handle and rebinding costs of $1.85 now approach the price of less expensive new books. The average cost of a book is $3. Therefore, rebinding should be discontinued.

4. Establish a board policy to collect funds for lost or damaged books.

Funds are not collected for lost or damaged books on a consistent basis. In 1970-1971, it is estimated that 8,563 books in high schools and 6,686 books in elementary schools were lost or damaged. No money was collected even though the persons causing the loss were identified.

Therefore, a policy should be established to withhold student records until debts due to such damage are paid. The annual saving is estimated at close to $46,000.

5. Establish a minimum inventory of library books and nonbook educational materials.

There is no minimum inventory requiremnt list published by the Division of Libraries. Guidelines in the form of a written inventory should be established for books and nonbook educational materials needed by elementary, middle, high, and vocational schools in the Chicago system.

Such a list will ensure that all schools have the basic necessities. It will also allow for planning the minimum expense necessary to establish new libraries.

6. Establish a method to monitor the price of elementary books bought through the automated broker purchasing system.

No one has been assigned responsibility to monitor the purchase price of elementary library books to be sure the Chicago Board of Education is buying at the minimum level. Monitoring book prices throughout the life of the contract will prevent payment of any higher than necessary charges. Therefore, this responsibility should be assigned to the appropriate personnel.

Building Operation and Maintenance

The Department of Operation Services, headed by an assistant superintendent of schools, consists of four bureaus. Its Bureau of Plant Operation and Maintenance has the functions to:

- Provide proper mechanical operation of school buildings and shop facilities.
- Perform necessary maintenance and repairs, utilizing the appropriate in-house crafts/trades or outside contractors.
- Maintain proper level of custodial services.
- Provide in-house delivery of mail, maintenance supplies, and bagged lunches/breakfasts.
- Determine staffing levels of the operation and custodial forces.
- Transport and set up mobile classrooms.

The administrative staff, responsible to a director, consists of the Divisions of Operating Supervision, General Maintenance and Repair, Equipment Operation and Control, Electrical Repair, the 31st Street Shop, and the Methods and Standards Group. This bureau has a budget responsibility of approximately $67.5-million involving some 5,176 positions. There are approximately 565 school buildings of all types totaling 53.37-million square feet plus 1,330 mobile units with 1.06-million square feet.

The Division of Operating Supervision is decentralized while the balance of the bureau, for the most part, is centralized. There is some decentralization of the trade/crafts insofar as physical location of personnel, but not regarding management controls and authority. Two administrative groups operate within the board office. The administrative assistant responsible for General Maintenance and Repair is involved in recordkeeping, budgetary and requisition approvals, work priorities, and preparation of specifications connected with repair work.

Both budgeted and emergency type requisitions flow through him for approval and recording. Money for repairs is budgeted by schools, but spent by district. Repair work is broken into two categories—minor repairs budgeted at $2.8-million and engineering repairs at $2.1-million. Money is also budgeted to cover emergency repairs. Reallocation of emergency funds into minor repairs or engineering repairs is done if approved by the director and assistant superintendent. Approval of the board is required on major items.

The second administrative group, the Division of Equipment Operation and Control, is responsible for the purchase, maintenance, and repair of all school property and mechanical equipment not covered by those in the in-house trades and crafts. This includes such items as pumps, lunchroom equipment, plumbing, heating, sewers, garbage removal, and exterminating. Most of this group's activities comprise processing about 6,000 emergency jobs annually. The main administrative positions of the Division of Operating Supervision are the area chief engineers.

The next level of supervision is the district supervising engineer. There are 25 who are responsible for the present 27 school districts.

Within the school unit, the engineer-custodian is responsible for the supervision of the assistant engineer-custodian, fireman, janitor, janitress, and watchman. The operating staffing needs, and budgets for each school unit are established by the Methods and Standards group which consults with the district supervising engineers and area chief engineers on variations or exceptions to the previous year's budget.

The Methods and Standards group is a staff function with basic responsibilities of budget preparation, staffing, and auditing of all school building operating and custodial personnel. It is also responsible for establishing methods, standards, schedules for performing all necessary work, development of uniform training programs, review of records, and monies expended for school utilities.

There is no vehicle replacement program based on assigned life or mileage. Several 10 to 14 year old trucks, awaiting replacement, are idle in the yard.

In addition to the trades, a distribution group delivers and picks up all mail, supplies, materials, school lunches, breakfasts, equipment, and vendor materials. They deliver some 38,000 bag lunches and about 240 bag breakfasts daily to various schools around the city starting at 7:30 a.m. This group is also responsible for physical movement and handling of all mobile school buildings. These are transported by tractor-trailer. No data processing records are employed in the transportation activity.

The Division of Electrical Repair, headed by the Superintendent of School Electrical Repairs, is comprised of 71 field and two clerical people. All electricians operate out of the Central Office Building. The general foreman and his group handle all electrical work on language laboratories, mobile classrooms, security systems, and special projects. A large number of security systems are being installed as a result of an allotment of $800,000 provided by the federal government this year under Title V funds. It is estimated these systems will replace about 100 watchmen.

EVALUATION

This bureau's organizational concepts appear to be sound. However, policies, procedures, systems, and staffing employed lead to ineffectual implementation and operations. For the most part, administrative personnel are dedicated individuals. However, they are hindered by the present system within which they must operate.

Contributing factors and outside influences which bear directly on the performance of this bureau are vandalism, over-involvement of community groups, civil service restraints, union craft lines restrictions, lack of proper support from associated Board of Education departments, improper distribution of authority for control of people and expenditures, highly involved and time-consuming paperwork systems, and improper staffing and placement of personnel.

Vast amounts of money, approximately $3.12-million in 1971, are being expended because of vandalism. As an example, window breakage costs amounted to about $1.76-million for replacement of 110,000 plates of glass. This not only is costly but deprives the school system of normal repair work and preventive maintenance on the part of the custodial force as well as the trades. Over-involvement of community groups results in costly demands in the areas of school housekeeping, maintenance, repair, personnel selection, building design, and required facilities. Area chief engineers and district supervising engineers have expressed their concern.

Under the craft-union arrangement connected with all trades, many costly procedures are followed. For example, a school engineer-custodian is not allowed to remove or hang a shade within the school. Shades manufactured or repaired at the 31st Street Shops must be hung by a person or persons from that trade.

With the number of comments and complaints coming from persons within the Bureau of Plant Operation and Maintenance, many interdepartmental problems exist. The most frequent were lodged against the Systems Analysis and Data Processing Department. They indicated the wrong type of data are produced, too much information is being generated, and that no effort is made to study field needs. There was more than one complaint on the lack of involvement in formation of annual budgets. Comments were also made about the lack of involvement in budget cutbacks on the part of the area chief engineers and their subordinates.

Functions in the Purchasing Department can be improved to speed purchases and expedite repairs. The level of purchase authorization is too high and the dollar purchase limit too low. This again delays jobs getting done. Also, purchasing is too centralized, leaving no discretion for local purchases.

It appears that the position of Director of Plant Operation and Maintenance is practical and at a suitable level in the organization. On the surface, it seems the two administrative staff assistant positions are questionable. The Methods and Standards group, manned by two positions, is understaffed for the work they should be performing. Presently, they are serving as "fire fighters" rather than establishing manning guidelines, work methods and procedures, and other duties associated with this function.

The position of Superintendent of School Electrical Repairs appears unnecessary except for the location of this group. The Electrical Department has remained downtown rather than being transferred to the 31st Street Shops. This separation of like functions results in redundant supervision and scheduling.

The number of positions of area chief engineer are adequate and at the proper organizational level. Their span of personnel control is not unreasonable and might even be broadened. The area chief engineers are being hindered in the performance of their duties by vast amounts of paperwork and clerical activities. Therefore, they are not as effective as they could be in their management and supervisory duties.

The positions of district supervising engineer are overstaffed. There is potential for reassignment of some of these people to other activities. They are required to do too much basic clerical work. In addition, these engineers are involved in community and human relations. About 10% or more of their working plus some personal time is spent in handling outside school-community and people-related problems. Because of their other involvements, the supervising engineers are unable to devote sufficient time to school building supervision.

Custodial staffing guidelines are fragmented and have originated from various board of education reports and other judgments based on past practices. Very little, if any, studies of work requirements have been done since a 1957 survey was made by an outside consultant.

RECOMMENDATIONS

1. Initiate immediate action within the Board of Education to regain disciplinary control of the individual schools by taking firm measures and establishing detailed policies and administrative procedures.

Crime and vandalism is on the increase during and after school hours. The resultant annual repair and maintenance costs millions of dollars. Therefore, the Board of Education must define, in writing, its posture regarding the discipline to be maintained in school units. In addition, it must define the administrative procedures to be taken to implement disciplinary policies. Also, its policies and procedures must be effectively communicated to school administrators and the public.

When acted upon, the morale of administrative and operating personnel will be significantly improved. However, no dollar savings will be achieved until the policies and procedures have been implemented and enforced.

2. Develop and conduct a professional orientation program for educational and operating personnel covered in the previous recommendation.

In 1971, approximately $3.12-million was spent because of vandalism, burglary, theft, and fires. This represents an increase of $410,000 or 15% over 1970. These expenses are not recoverable through insurance policies. A good portion of this cost—about $1.76-million—was due to window breakage.

In an elementary school, there was an estimated $590 worth of damage in one month, not including 76 windows, 26 of which were broken twice. In a high school, the monthly cost was $795 for toilet paper holders broken off walls, two cracked urinals, 29 broken desks and seats, and other acts of vandalism. Also, documented cases of students carrying guns and shooting at school personnel are in the files of Plant Operation and Maintenance.

The solution to this problem, which is basically social, goes beyond the control of school personnel and involves the law enforcement agencies and community groups. However, a program originally designed for school personnel, which has the capabilities of being broadened, will be a first step.

This program will clearly define responsibilities and authority of school personnel, disciplinary action to be taken, security procedures to be followed, communication and motivation techniques, interrelations with other groups, and legal aspects of acts of crime or vandalism. A participative style rather than instructional, will be used to conduct the sessions with community leaders and law enforcement personnel together with actual experiences of the schools which have a good record of control. Guidelines and indices will be established to periodically review and evaluate the amount of change occurring in schools after the program.

The previous recommendation provides for an important provision to acquaint community groups with the content of the program. Despite any possible disagreement, it is essential that the Board of Education stand behind any individual that takes the corrective action stipulated under the approved program. It is conservatively estimated that a reduction of 5% of 1971 costs, amounting to $156,000, could result after implementation.

3. Provide the area chief engineers with authority to suspend personnel under their control.

At present, authority to issue suspensions for violations such as insubordination, improper conduct, unsuitable performance of duties, excessive absenteeism, and other acts is vested in the office of Director of Civil Service Personnel. An excessive amount of time, in many cases three or four months, is required to process paperwork and obtain approvals before the trial or hearing stage is reached. As a result, morale of the department is at a low level because of the disregard of supervisory authority and substandard performance as well as poor attitudes on the part of many employees.

To alleviate these problems, authority for the right of suspension (maximum of 30 days) for just cause should be delegated to the area chief engineer for all personnel under his jurisdiction. In most cases, particularly those involving lower level positions, his judgment should be supported by and based on the recommendations of the district supervising engineer and engineer-custodian.

After implementation, consideration should be given to transferring some of this authority to the district supervising engineer. This will involve creation of policies and procedures to insure proper documentation and processing of disciplinary cases.

A more expedient application of penalty to an alleged violation will improve work performance, lower operating costs, make more efficient use of supervisory time, improve morale of all levels of operating personnel, and reduce overtime due to improved productivity. On the basis of good business judgment, it is estimated that increased productivity will result in reduction of overtime and personnel amounting to approximately 5% of the work force of about 4,500 in the three areas of the city and central office. Anticipated annual savings of close to $2.77-million can be achieved.

4. Permit the present work force to perform more of the repair and maintenance work required in their school buildings.

The current method of performing school repairs and maintenance handled primarily by the 31st Street Shops' crafts and electricians limits the utilization of school operating personnel to do this work. As a result of operating personnel not being able to inform school and community groups as to work schedules and job completion dates, strained relationships are developed as they view them responsible for maintenance and repairs.

Therefore, the engineer-custodian and his staff should assume more responsibility for performing repair and maintenance work within his school without outside help. This would encompass the type of work done by all of the trades. An effort should be made to provide adequate quantities of tools, materials and supplies to be stored at the schools under the direct control of the engineer-custodian with authority to requisition exceptional supplies from the warehouse. When the district supervising engineer determines his staff cannot satisfactorily perform the work, he will have authority to use outside contractors or other departmental personnel.

Implementation benefits will provide a reduction in the backlog of repairs; repair and maintenance work started sooner; a lowering of labor costs and paperwork; better utilization of present custodial workers, 31st Street Shops' staffs, and electricians; and improved relationships between operating personnel, educational, and community groups. In addition to undeterminable savings in reducing paperwork, an estimated reduction of 20% of selected crafts at the 31st Street Shops and electricians could be made for estimated annual savings of $1.06-million.

5. Transfer the Division of School Electrical Repairs from the present downtown location to the 31st Street Shops.

With the exception of electricians, all trades are located at the 31st Street Shops. They operate as a separate group from the balance of other trade and related groups. The division has its own department head and office force. As a result, there are certain duplications of effort and a strong need for coordinated interdepartmental relations to get certain school repair jobs done expediently.

A practical solution would be to have the electricians report to the 31st Street Shops. Much of their materials are stored at the shops now. Implementation would absorb present central office administrative and clerical functions with present work force at 31st Street and place the supervisory responsibilities for electricians under the Supervisor of Shops.

Benefits would provide a reduction in administrative and clerical overhead, improved scheduling and coordination of electricians in conjunction with other crafts, and better utilization of building facilities. Elimination of three employees in this division would save an estimated $51,000 annually in salaries and fringe benefits.

6. Reduce the number of district supervising engineers from 25 to 17.

Under present arrangements, district supervising engineers are required to perform excessive amounts of clerical work. Some are involved in special project work which, although important, should be performed by other personnel. As a result, they are underutilized in a supervisory capacity.

Therefore, make it mandatory that all possible clerical work be transferred to the clerical staffs of those schools in which these engineers have their offices. Also, assign special project work now requiring extended time of the engineers to appropriate staff groups, such as Methods and Standards and redistrict the total number of schools among the remaining 17 district supervising engineers.

Implementation will make better use of supervisory talent, provide better service to the schools and community, and reduce costs. Reduction of clerical work and elimination of special projects will provide annual savings of $239,000.

7. Formulate and install a direct labor timekeeping and reporting system for all of the 31st Street Shops' personnel including electricians.

The present manual system of individual timekeeping and reporting is inadequate and provides many potential opportunities for misuse. For example, there is no direct control over arrivals and departures of tradesmen from individual schools, no effective check of total actual hours worked per day per man, and no reliable check of actual hours worked per job per man.

Establishing a timekeeping and reporting system would:

- Provide individual daily time cards per man, indicating time-in, time-out, work order number, description of job or activity (travel time), location of work, and required approvals.
- Establish a policy that tradesmen, internal or external, must be signed in and out of school buildings by the engineer-custodian.
- Have the engineer-custodian sign the tradesman's time ticket in ink indicating approval of time charged to his school, per job.
- Provide that craft foremen check, approve, and sign daily time tickets of their personnel, and be held responsible for accuracy of all information on the ticket.

Implementation will result in better control and utilization of personnel, reduction of late arrivals and early departures, more realistic travel times between schools or jobs, improved work performance, better cost control of charges to individual schools, and reduction of present backlogs of work.

It is estimated that a minimum improvement of 10% can be achieved in the work performance of the 31st Street Shops. On the basis of 418 trades people, the annual savings would amount to $620,000.

8. Assign direct responsibility of operating personnel to the Director of Plant Operation and Maintenance to conform to the present policy of separation of administrative responsibility between the operating and educational function.

The lines of reporting relationship and accountability are not clearly defined and known throughout the various levels of the organization. To alleviate this problem, the direct and functional lines of control and reporting relationships should be identified and published and a participative management style developed to improve the functional relationship between the operational and educational activities.

Operating personnel should not be placed under the direct control of educational administrators. This will improve understanding of present organizational structure and permit educational personnel to concentrate their efforts in their main area of concern.

No tangible dollar savings can be established. However, placement of operating personnel under the control of the educational administrators would be a serious violation of good administrative practices.

9. Hire a trained professional industrial engineer to direct the activities of an enlargement of the present Methods and Standards group, reporting directly to the Assistant Superintendent of Schools — Operation Services.

The present Methods and Standards group is unable to meet its charge because it is understaffed and lacks depth of qualifications of personnel, professional direction, and coordination. Thus, meaningful work which could result in significant cost savings in plant operations and the central office is not being performed.

Therefore, a qualified industrial engineer who is steeped in indirect labor, clerical, maintenance, work measurement control, and with a record of successful cost reduction implementation should be hired. He should be provided with the necessary authority and latitude to properly establish a productive and viable department. Under his direction, establish qualifications and experience requirements for the methods and standards position. Concurrently, he could assist in the work measurement study recommended in the section on Personnel.

Every effort should be made to seek an individual within the existing school system who satisfies the established job requirements. If the proper talent cannot be located within the school system, it will be necessary to broaden the search to the industrial community.

After increasing the staff with the supervisor and four engineers, it is estimated that a potential reduction of approximately 15% can be realized through the application of sound industrial engineering techniques. Applying this against the present head count of the plant operation and maintenance group, the possible savings, including fringe benefits, will amount to approximately $9.42-million per year.

10. Establish a job costing system based on actual charges for maintenance and repair work done by the 31st Street Shops and the electricians.

At present, an antiquated system is used to charge schools for maintenance and repair work. After a school engineer-custodian requests assistance, a foreman is sent to make a cost estimate. It includes materials, direct labor, and overhead charges. After approval, this estimate becomes the charge regardless of the actual cost. Cost of materials are, at present, the only portion of the actual costs charged to the job. To balance charges to estimates, actual labor costs and overhead must be shifted from job to job. In some instances, they are charged to a different school, district, and area.

The solution to this problem is to charge schools for the actual cost of each repair job. The production order form should be redesigned to provide for the total estimated cost as well as actual labor and material charges.

Cost computations, pricing materials, and posting production orders should be made a clerical function. By separating the functions of estimating and supervising work performance, a system of checks and balances would be established. Each engineer-custodian should be given a copy of the completed production order to guard against unreasonable cost variances.

The major benefits to be realized from implementation would include:

- Better work performance—the engineer-custodian, who has budget responsibilities would audit the cost of the repair work and could object if unreasonable charges were made. In addition, a further check on the performance of shop personnel would be gained.
- Better use of the foremen's time—by eliminating the price adjusting function, foremen would have more time available to supervise their men.

Under the proposed system, employee time tickets would report actual on-job times. Foremen would have a means of gauging individual work habits. Waste would be prevented if engineer-custodians had to account for leftover materials. The potential saving after implementation cannot be estimated due to the inadequacies of present data. However, it should be substantial.

11. Raise the authorization of expenditure level for area chief engineers, district supervising engineers, engineer-custodians, and comparable levels.

The existing system for approval of expenditures is too stringent, cumbersome, and time-consuming, and results in unnecessary costs. A specific case was observed where a requisition for $49 was processed through 13 steps by an administrative assistant prior to issuance of a production work order.

A solution would be to raise the expenditure authorization level in direct proportion to job responsibilities. For example, area chief engineers should have signature authorization on production work orders of $1,000, a district supervising engineer should be authorized to spend $500, and the engineer-custodian, $50.

The current procedure to encumber funds prior to starting maintenance and repair work should be revised so work can be started prior to this accounting step. To maintain control of expenditures, it is important that accurate and complete budget reports are issued monthly to the appropriate individuals indicating positive and negative variances by account. Major benefits include:

- Reducing the time to process work requisitions and start up of needed work.
- Minimizing the clerical work performed by the director, administrative assistants, and area chief engineers in reviewing and giving signature approvals of work requisitions. This will free these incumbents to perform more of their other supervisory duties.

12. Transfer the function of property control to the 31st Street Shops and develop a computerized program to maintain furniture and equipment records.

Currently, there is a duplication of effort between eight clerical personnel in the central office property control group and two in the 31st Street Shops. Additionally, there are inherent shortcomings. For example, purchase costs are not recorded, deliveries and disposals are not reported, periodic validations of property files are nonexistent, and there is no depreciation policy.

Therefore, a mechanized property control system should be adopted. Inputs would be limited to purchase orders at the time of equipment purchase and annual cycle reports from the school principals indicating receivals, disposals, and the like since the previous cycle report.

Amortization calculations should be computerized and validations achieved by an external audit. A reliable property control file, accurate to an average of six months and validated by external audit, will result. Clerical work at schools will be lowered by an undeterminable amount and mechanization will reduce the work force in the Division of Property Control by six persons to save approximately $53,000 annually.

13. Employ outside janitorial services in a representative sampling of schools in the Chicago system.

Existing board-employed janitors and janitresses are generally a source of concern. There is an excessive turnover rate, absenteeism and tardiness is high, and undesirable and troublesome as well as poorly-performing employees are numerous. Additionally, many of the janitorial work force personnel use their school job as a secondary "moonlight" position to supplement their income

Supervision of these employees is difficult since they are in the schools after hours when the engineer-custodian is gone. Threats of bodily harm to supervisors and damage to theirs and others' cars are a matter of record.

A solution would be to establish a trial period of two or three years, displacing the board's janitorial work force in selected schools with outside janitorial service companies. A contract with a 30-day cancellation for unsatisfactory performances should be prepared. Industry experience indicates savings in excess of 10% of present costs are attainable. No savings are claimed, but based on a $24.1-million annual payroll, a potential savings of 10% would amount to $2.41-million.

14. Introduce a professional work measurement program and revise existing staffing guidelines to obtain more meaningful and functional standards in the operating section of schools.

Current staffing guidelines are outdated and do not reflect variables in building design, new materials used, and improved methods and procedures which can and are being utilized. The present standards are not broad and flexible enough to cover the variables and, therefore, lead to improper staffing. Additionally, use of factoring, a method of overtime payment on a fixed basis to custodial employees, leads to overstaffing as well as unnecessarily high salary expenditures.

Therefore, a work measurement program under the guidance of an industrial engineer should be conducted to update the staffing in relationship to school size, age, building design, type of equipment, floor coverings, facilities, and so on. Standard data used in industry should be reviewed for similar activities to develop practical standards with an eye toward economy. Also, the system of factoring overtime should be examined if the payment for actual hours worked would prove more economical. Benefits of implementation will:

- Reduce the custodial staff, resulting in undeterminable savings.
- Lower fixed overtime payments.
- Provide efficient operations.
- Furnish accurate accountability.
- Provide better operating systems.

15. Analyze and audit electric power, water, and natural gas utility bills and contracts periodically to determine proper rate applications and billings.

Usually, these utility contracts are complicated instruments requiring specialized knowledge to analyze and interpret. Further, there is no federal or state regulation which requires utilities to state that their customers enjoy the lowest available costs.

Consequently, industries and institutions have recognized that contracts and rates are traditionally misapplied. As a result of the savings potential, industries are, with increased regularity, hiring consultants or employing their own specialist.

Professional evaluations and auditing of utility contracts and rates by an internal specialist or outside consultants would determine the extent of possible savings. Hiring an outside consultant to study the contracts for one year would determine if this should be a continued practice and whether or not it could be handled by an internal specialist.

Audited savings to the state range as high as 10%. A conservative estimate of 5% will produce an annual saving of $275,000. The one-time cost of this audit is about one-half of the first year's saving, or $135,000. Costs and savings have been included in the statewide report.

Facilities Planning and Space Utilization

The Facilities Planning Department operates under an assistant superintendent of schools who reports to the General Superintendent of Schools. It has a staff of 15 employees. Salaries amount to $210,000 per year. This department consists of the:

- Population Studies and Facilities Inventory Section staffed by one professional.
- Facilities Planning Section consisting of a director, two professionals, two technicians, and two clerks.
- Division of Real Estate headed by the Real Estate Agent and five clerical persons. Also, there is a clerk and a field inventory employee, both paid under the federally funded ESEA program.

The primary functions of the department are to determine the need for a facility, site location and acquisition, size and use of facility, establish school boundaries, develop estimated budget costs for facilities, and provide long-range plans. At the end of 1971, there were about 200 new and replacement projects at estimated construction costs of approximately $320-million in various stages of planning for the 1972 to 1979 period. These included Public Building Commission projects, rehabilitation programs, regular in-house construction, and mobile units.

The Population Studies and Facilities Inventory Section prepares facility inventories, use of classroom reports, space utilization reports, and organization of schools. Additionally, it performs staffing analyses, enrollment projections, census and census updatings, student population reports, and maintains a key plan on every facility. The Facilities Planning Director has responsibility for developing current and long-range plans for use of facilities as well as locating and relocating all mobile classrooms.

When the plan (type of school, location, and number of classrooms) for a new facility changes for an existing facility, a school closing or a new school boundary has been formulated, it is submitted to the Board of Education and the local community council for approval. The local community council must approve all plans.

After necessary approvals, the Division of Real Estate makes a physical survey and reports on the cost of acquisition of the chosen site. The Division of Real Estate prepares a Board of Education resolution for purchase at the appraised value or through condemnation procedures. Implementation of approved plans for a new facility is carried out by the Department of Operation Services or the Public Building Commission.

The Division of Real Estate maintains files on property that include legal descriptions, uses, how it was acquired, when purchased, and purchase price. There are approximately 680 land parcels held in trust by the City of Chicago for the Board of Education.

The Division of Real Estate is also concerned with leasing of properties owned by the Board of Education and the leasing of 50 properties for school purposes. There are 65 properties being leased. They produced a revenue of approximately $948,000 in 1971. In addition, this division is the custodian for all contracts. It is also the office of records for the Board of Education's automobiles, leased mobile equipment, and driver education vehicles.

EVALUATION

Due to the lack of well-defined responsibilities, authority, accountability, modern tools, and up-to-date information, evaluations are performed with less than optimum effectiveness. Information is received too late. For example, student population figures are a record of additions or reductions which are two months old. Therefore, the need for relocating mobile classrooms to alleviate unanticipated overcrowding is reacted to on an emergency basis after the fact. There is a real void because no reliable reporting system is available to keep the facilities planner advised of the true status of projects under construction. Under these conditions, the planner cannot determine whether or not he must make other temporary arrangements.

The Board of Education's rule requiring official approval of plans by community groups dilutes the effectiveness of professional planners. Additionally, it often adversely affects the cost and availability of facilities at the time needed.

Maintenance of corporate records is a vital function of any business. Some records and functions are better kept in the office which controls that function. For example, licensing and recordkeeping associated with driver education vehicles should be maintained by the Division of Driver Education. The physical facilities for storage of vital records do not afford the protection from fire, theft or other catastrophe. Many records are stored on open tables and in unlocked files.

A total combined record is kept in the "city book." There is only one copy of this manual which is stored on a counter-top with no protection. Loss of this book would require a time-consuming search. The efficiency of the operation appears to be satisfactory despite archaic record storage and retrieval systems.

RECOMMENDATIONS

1. Prepare functional position descriptions in the Facilities Planning Department.

At present, there is no formalized job or functional description for personnel in the department which lists responsibility, authority, and accountability. All instructions are verbal and on an informal basis.

When established, job and functional descriptions will identify areas from which information and format must be obtained. They should specify work flow, areas of responsibility, authority, and accountability. This will eliminate personal interpretation of what information is required for the function and minimize duplication of effort.

2. Standardize reporting system of student population and facilities inventory.

Present reporting systems allow the reporter to place interpretations of information required for current facilities and future projections of student populations. These data can be interpreted to protect his area of responsibility such as overstating student projections to retain present or gain additional staff and services. Standardizing of the reporting system will preclude individual interpretation of the facts.

3. Design and utilize mechanized population and facilities inventory studies.

Currently, information is compiled manually by the Administrative Research Department from monthly reports prepared by the individual schools. It is again restated by the Director of Population Studies and Facilities Inventory each month. There are 12 employees devoting about 15 days a month to this function. When compiled, it is two months old.

A properly designed mechanized program will establish a data base requiring changes only be entered on the machine. This will eliminate monthly restructuring of population reports and minimize clerical errors in transcribing them. Information will be current and available on demand.

Also, use of present mechanized equipment will reduce the number of presently required personnel. It is estimated that a reduction of 50% of the personnel in the department can be made to provide annual savings of $53,000.

4. Transfer tentative facilities budget cost preparation to the Department of Operation Services.

Currently, the tentative budget for new facilities construction is prepared by Facilities Planning for yearly and long-range budget requirements. This group has no accountability for actual costs.

Placing accountability for budget costs with those groups responsible for preparing the design and construction will fix accountability for budgeting costs with those responsible for expenditures. Facilities Planning would provide facts such as educational needs and number of classrooms required.

5. Provide adequate storage facilities for the protection of vital records.

Proper storage facilities are not available in the Division of Real Estate for preservation of vital records. Therefore, fireproof filing cabinets should be installed. One-time costs have not been estimated.

6. Reassign the licensing function and recordkeeping of driver education vehicles and other motorized conveyances to those departments responsible for their administration.

Licensing of motor vehicles and storage of title and license records are a function of the Division of Real Estate. Persons or departments having control of such vehicles are best able to maintain them as well as other performance records. Therefore, the title records and licensing responsibility as well as one clerk should be transferred to the appropriate department. This will help prevent dilution of the proper function of the Division of Real Estate.

School Construction

School construction is a function of the Operation Services Department, headed by an Assistant Superintendent of Schools in Chicago. The people directly concerned with school construction number 79, with 118 authorized. It is broken down into the major functional groups of Office of Projects Coordinator, Bureau of Architecture, Office of Contract Control, Division of Property Control, and Office of the Assistant Superintendent - Public Building Commission Coordinator.

Primary functions of the school construction operation are to implement plans for new facilities and rehabilitate existing buildings in accordance with plans, specifications, and established budgets. Currently, these include a $32-million annual appropriation of school funds, $250-million in five- to seven-year rehabilitation funds, and $196-million encumbered for construction by the City of Chicago, Public Building Commission (PBC).

The Facilities Planning Department determines existing conditions and future needs, then develops overall plans for school construction. The decision for method of implementation, be it in-house engineering, outside architect, or the City of Chicago Public Building Commission, is made by the Office of the Superintendent - Operation Services. A report is submitted to the Board of Education setting forth recommendations as to the method. After the initial report is approved, implementation is accomplished through the Bureau of Architecture, assigned through the Office of Projects Coordinator to an outside architect or assigned to the Public Building Commission on the basis of school board policy.

The function of the Projects Coordinator is to:

- Maintain liaison with private architects in new construction when outside architects are used.
- Coordinate all rehabilitation work under Fund 325-5 authorizing expenditures of $250-million.
- Initiate guidelines for and review plans for construction of new facilities and structures to be erected by the City of Chicago Public Building Commission.
- Prepare plans and guidelines for use of outside architects and Board of Education reports to obtain authorization for the work.
- Check preliminary drawings and specifications.
- Approve final contract drawings.
- Recommend awards of construction contracts.
- Follow progress of various jobs.
- Make status reports.

Historically, this office has concerned itself with new construction using outside architects. In the past 15 years, 101 new schools were erected using the office as coordinator. However, this activity is being phased out with the advent of the Public Building Commission. Its major activity will now be concentrated in rehabilitation programs.

When a building project is assigned to the Bureau of Architecture, it prepares working drawings and specifications, submits them to contractors for bids, provides field inspection services, approves payments to contractors, and follows through to project completion. This work is initiated in the Office Services group within the Bureau of Architecture. Its function is entirely clerical and the salaries of its nine people are prorated and charged against current building projects and are capitalized.

The director of this bureau assigns various tasks of the engineering effort such as specifications, architectural drafting, mechanical, electrical, structural engineering on new construction, and certain types of rehabilitation or major repair work to the 48-man staff. The Division of Construction in the bureau is headed by an acting Chief of School Construction and staffed by three electrical, two mechanical, and eight general field inspectors. Its primary function is inspection of building work under construction.

Authority to make changes involving additional expenditures up to $2,500, a Board of Education limitation, is vested in the Chief of School Construction. There is apparently no control as to the number of such changes which are made.

When a decision has been approved by the Board of Education to construct a facility using the services of the Public Building Commission, the Assistant Superintendent - Public Building Commission Coordinator acts as liaison between it and the board. He makes a monthly status report to the board and also serves as an ex officio member of the PBC.

The board studied the PBC and asked to subscribe to this effort in 1968, ostensibly to alleviate the burden on currently available school funds. Originally, $150-million was the estimated requirement for new school construction. This has now escalated to about $250-million covering approximately 21 proposed projects of which 18 are scheduled or have been started in 1972.

Educational needs and construction guidelines are prepared by the Board of Education and furnished to the PBC which provides information and requirements to outside architectural firms. The PBC receives 2% of the project cost for administrative and executive services which becomes part of the capital investment. It authorizes the sale of revenue bonds to the public. When the bonds are retired, the building ownership is turned over to the board. This is, in effect, a lease-back arrangement.

EVALUATION

The Office of Projects Coordinator is chartered to correlate construction activities in the Board of Education. However, as PBC construction is actually coordinated through the Office of the Assistant Superintendent - Public Building Commission Coordinator, little or no control can be exercised by the coordinator in the total construction program. As of August 1972, PBC coordination was transferred to the Office of Facilities Planning. This further reduces control of the PBC construction program in the Operation Services Department.

The Office of Projects Coordinator is not adequate to effectively coordinate all construction activity including the large rehabilitation program consisting of approximately 389 projects over the next five to seven years. Full use of existing and potential data processing information and programs are not being utilized. This omission dilutes the effectiveness and accuracy of recordkeeping.

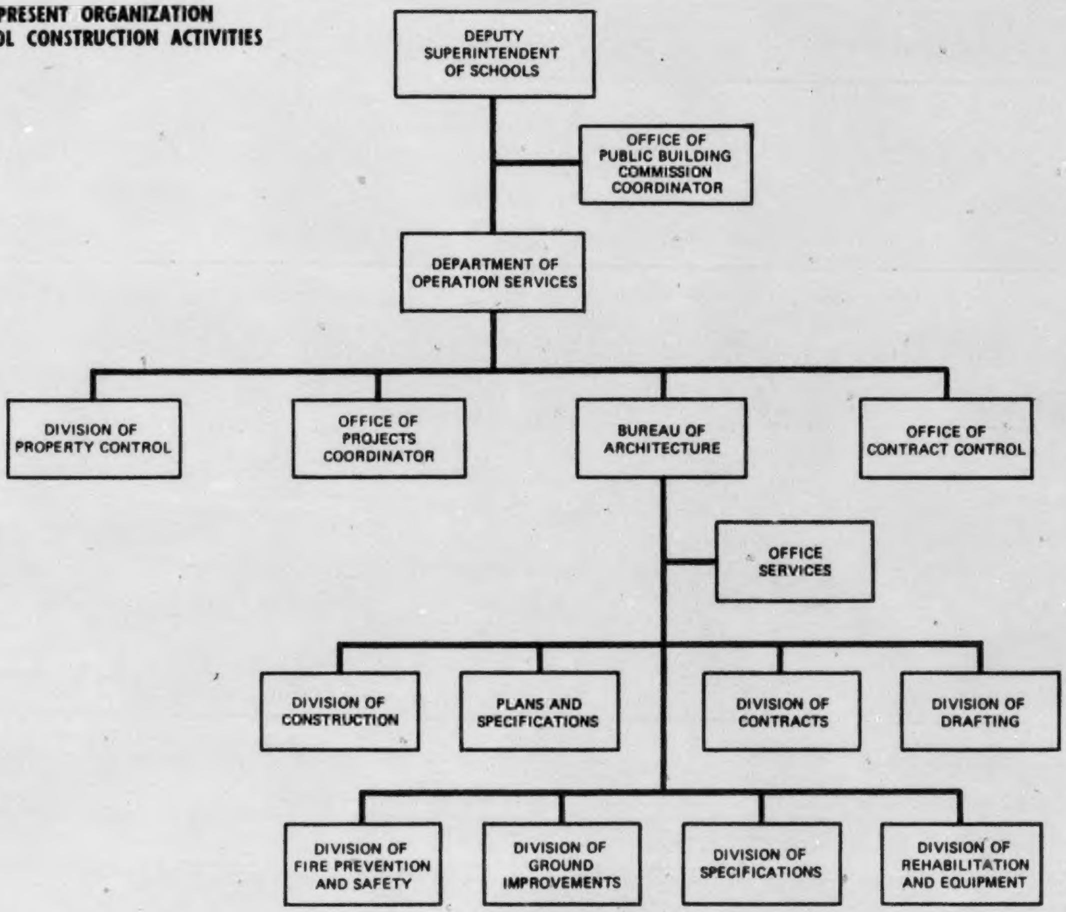
This office does not have full cooperation of the Bureau of Architecture and the PBC. It maintains complete and up-to-date records on progress and costs of projects from reports made available to it by the bureau and the commission.

Basic functions of Office Services are performed with inadequate recordkeeping procedures. Files of documents, contracts, and so on are haphazardly kept, leading to possible mislocation of valuable information and records. As most actions are initiated by verbal instruction, there is no method of retrieval or tracing.

No daily log showing status of work, various trades being used, materials delivered, and the like is apparently made or submitted. Therefore, no meaningful progress report is made or submitted to the board on a regular basis. There is no completion report made to show amounts expended on each category of work which can be reconciled with authorized contract amounts and provide a proper explanation of variations.

The practice of the Superintendent of Construction to authorize changes and extras to the contract for items under $2,500 does not provide the Board of Education control of additional costs to a previously approved contract. In a June 1972 meeting, for example, authorization was given to pay approxi-

PRESENT ORGANIZATION
SCHOOL CONSTRUCTION ACTIVITIES


DEPUTY SUPERINTENDENT OF SCHOOLS
OFFICE OF PUBLIC BUILDING COMMISSION COORDINATOR
DEPARTMENT OF OPERATION SERVICES
DIVISION OF PROPERTY CONTROL
OFFICE OF PROJECTS COORDINATOR
BUREAU OF ARCHITECTURE
OFFICE OF CONTRACT CONTROL
OFFICE SERVICES
DIVISION OF CONSTRUCTION
PLANS AND SPECIFICATIONS
DIVISION OF CONTRACTS
DIVISION OF DRAFTING
DIVISION OF FIRE PREVENTION AND SAFETY
DIVISION OF GROUND IMPROVEMENTS
DIVISION OF SPECIFICATIONS
DIVISION OF REHABILITATION AND EQUIPMENT

mately $840,000 of accumulated extras which were encumbered through verbal orders.

The deficiency of documented job description, functional definition, line of authority, work flow procedures, and cost accounting methods within the Bureau of Architecture results in waste of manpower, lack of control and accountability, and duplication of effort.

There is no detailed master construction program developed for all school construction work. Consequently, the reporting cost control system has little meaning since it cannot be correlated to the overall construction program.

RECOMMENDATIONS

1. Reorganize the school construction operation by placing control and responsibility under the Bureau of Architecture.

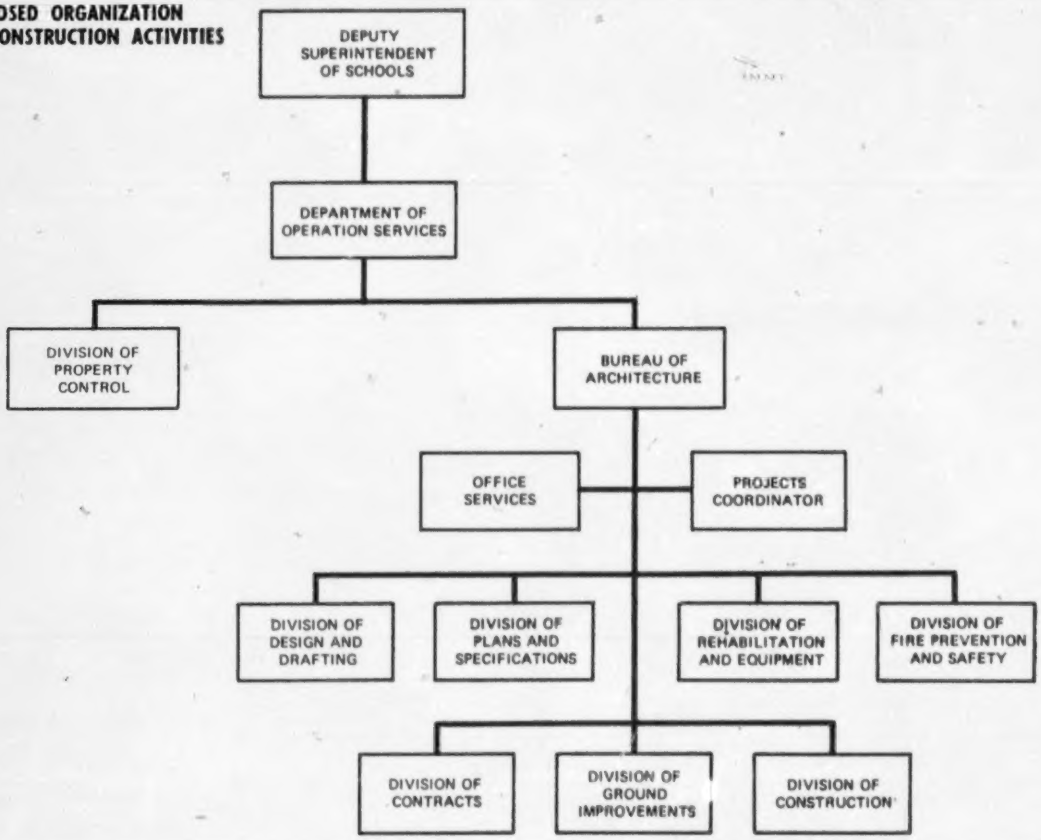
School construction operations, as presently structured, are diffused into several programs and administered by different organizational units. As a result, it is difficult to fix responsibility.

Activities of the Public Building Commission are guided, but not fully controlled, by school administrative personnel. The rehabilitation program is under the direction of the Office of Projects Coordinator. The Bureau of Architecture controls only certain school construction projects. Contract control is vested in still another office. Although their functions are primarily schoolhouse construction, none of these administrative groups, as depicted in the present organization chart to the left, are responsible to the other.

A single construction program including new, deferred rehabilitation, normal maintenance construction, and repair should be established and controlled by the Bureau of Architecture. It should have a well-defined line of authority, responsibility for expenditures, and accountability for school construction through to the school board level. This would include establishment and maintenance of complete records such as, but not limited to, daily program reports, disposal accounts, and a current master drawing file.

The proposed organization chart, as illustrated below, would require these changes:

PROPOSED ORGANIZATION
SCHOOL CONSTRUCTION ACTIVITIES


DEPUTY SUPERINTENDENT OF SCHOOLS
DEPARTMENT OF OPERATION SERVICES
DIVISION OF PROPERTY CONTROL
BUREAU OF ARCHITECTURE
OFFICE SERVICES
PROJECTS COORDINATOR
DIVISION OF DESIGN AND DRAFTING
DIVISION OF PLANS AND SPECIFICATIONS
DIVISION OF REHABILITATION AND EQUIPMENT
DIVISION OF FIRE PREVENTION AND SAFETY
DIVISION OF CONTRACTS
DIVISION OF GROUND IMPROVEMENTS
DIVISION OF CONSTRUCTION

- Reassign the functions of the Projects Coordinator to the bureau. — Currently, the Office of Projects Coordinator prepares guidelines, schedules, and the like for use by the PBC and the Bureau of Architecture. However, it has no control over implementation of the scheduled work except by informal cooperation of the PBC and the bureau. This office should be moved into the Bureau of Archtecture to enable it to directly supervise the activities of the bureau relative to the PBC and the rehabilitation program. With the eventual phasing out of the PBC and rehabilitation programs, it could assume control of all new school construction activities. The person occupying this office must have good administrative qualities and technical expertise which will enable him to establish valid business management procedures as well as standardize all reporting, cost control practices, and work flow. Integration of this office and the Bureau of Architecture will eliminate the position of Assistant Director in the Bureau of Architecture as well as three positions in the administrative staff and provide annual savings of about $81,000.

- Merge the Division of Specifications and the Plans and Specifications group. — These two units presently perform redundant functions. Their activities should be merged. Implementation will eliminate the division's administrator and result in annual savings of $25,000.

- Transfer functions of the Board of Education's Public Building Commission Coordinator to the Bureau of Architecture. — This office is primarily a clerical function with no real control over the final product. Its work should be transferred to the Office of Projects Coordinator within the bureau which has an adequate staff to perform this function. A saving of some $69,000 annually in salaries by eliminating three employees will be realized without affecting the expected end product result.

- Eliminate the Office of Contract Control. — Preliminary preparation of the various contract documents is made by the Bureau of Architecture. Additionally, it prepares the documents and checks them for adequacy. The Office of Contract Control rechecks that the proper documents have been prepared and assembled in correct sequence. Therefore, responsibility for proper preparation and sufficiency should be placed with the originators. Implementation will provide the necessary control and accountability as well as save about $20,000 annually by eliminating the administrator.

The total savings to be realized from implementation of this reorganization will amount to approximately $195,000 per year.

2. Prepare job and functional descriptions indicating line of work flow, responsibility, accountability, and authority for the Department of Operation Services' groups associated with current and projected school construction.

Presently, job descriptions for positions within the Bureau of Architecture as well as supporting groups including Contract Control, Public Building Commission coordinator's office, and the Office of Projects Coordinator are not available. All instructions pertaining to specific duties for each position appear to be on verbal basis. There is no delineation as to individual responsibility or accountability for any phase of a construction project.

The lack of well-defined authority and responsibility results in an inability to maintain meaningful records of the total construction program. Further, the absence of job and functional descriptions precludes effective interaction and cooperation between concerned groups associated with school construction. This leads to inefficiency and duplication of effort.

Therefore, the preparation of documented job and functional descriptions will be the first step toward establishment of areas of responsibility, authority, and accountability.

A reduction in the staff of the Bureau of Architecture will be effected due to a decrease in duplication of effort and improved efficiency. Implementation will provide annual savings of $49,000 by eliminating five clerical positions.

3. Establish a detailed and daily status report for school construction projects.

No daily log is required for each project showing status of work by trades, number of trade mechanics, materials delivered, services rendered or work completed. In addition, there is no regularly scheduled progress or completion report available to the Projects Coordinator, Facilities Planning, and the Assistant Superintendent - Operation Services.

The Projects Coordinator should establish a daily reporting system which will provide more orderly work flow, better control of work schedule and completion time, improved cost control of extra work, protection of materials from loss or theft, and greater assurance of planned occupancy at the required time. The cost of implementing such a reporting system would be saved through the reduction of material loss alone.

4. Design and implement a retrieval and tracing system for documents within the Board of Education.

The present method of transmitting documents, contracts, and requests for payment is done with no set procedure. There is no way to determine the progress of any file, where it is, and action taken.

Therefore, a positive retrieval program should be instituted to provide orderly work flow, reestablish creditability with contractors who receive delayed payments, and reduce clerical efforts needed to maintain the records of school construction. Savings are inherent with a systematic routing and reporting system but they are not identifiable.

5. Require verification and approval by the field superintendent of the contractor's affidavit submitted with his request for payment.

Present practice requires approval by the field superintendent of the contractor's request for payment only. No approval is required on the affidavit. The affidavit is the only document showing work performed and must be reconciled to the request for payment with labor, materials, and the like completely detailed. Implementation will assure that work paid for has been performed and fix accountability for the record.

6. Establish written guidelines for the control of expenditures on school construction projects.

Present practice permits the construction superintendent to make additions by items up to $2,500 to the contract cost without prior approval. When accumulated, these items amount to a considerable cost addition to previously Board of Education approved contracts. In the June 1972 board meeting, authorization was given to pay approximately $840,000 of such accumulated extras which had been encumbered through verbal orders.

A limit in percentage for variances to the approved contract amount should be established. Any amount exceeding this should require prior approval by authority outside of the Bureau of Architecture. Each change order should be documented in writing to justify the action, approved by Assistant Superintendent of Schools - Operation Services, and included as a permanent record in the original contract files. This procedure establishes accountability and sound cost control of a construction project.

Pupil Transportation

The transportation of children in the Chicago school system is under the control of the Bureau of Transportation Services. This agency is comprised of a director, supervisor, three coordinators, and five typists. Its primary duties are to:

- Assign pupils to 246 handicapped and 34 normal routes.
- Supervise in conjunction with carriers the movement of all public and nonpublic vehicles.
- Train and supervise about 365 children's welfare attendants as well as solicit bids, contracts, and reimbursement for all nonpublic carriers.
- Maintain records in connection with pupil transportation activities.

The actual scheduling of buses and other means of transportation is done by the principle contract carrier. Working with the department, it takes the information relative to pupil home locations, type of handicaps, and school locations to develop vehicle routings and time schedules. About 5,600 and 1,700 handicapped children from public and nonpublic schools respectively, are transported daily. These children are picked up and returned in front of their homes.

In addition to the 240 buses used, some handicapped children are carried by 39 taxis to public schools and by three to the nonpublic schools. Payment for this service is at regular meter rates. An attendant rides in the taxis with all children under 12 years of age or with those having severe handicaps.

With four exceptions, all pupil transportation in the Chicago school system is limited to the transporting of handicapped children. They are:

- Transportation of about 250 displaced students, on a temporary basis, from one attendance area to another until a new school is built. Some eight schools are involved and 12 to 14 buses are provided on a contract-lease basis.
- Carrying of children to two magnet-type schools from areas within the city. Two bus companies

provide contract-lease buses with drivers. One furnishes six buses handling about 240 children and the other provides nine buses for some 400 students attending another school.

- Conveyance of youngsters to schools with available classrooms on a temporary basis while their home school is being rehabilitated. A company provides four buses with drivers on a contract-lease arrangement to carry approximately 240 children.
- In addition, 3,970 pupils attending 330 schools of a special nature are given daily carfare to ride public transportation vehicles to and from school.

There are about 365 welfare attendants who ride in buses, vans, station wagons, and taxis with the children. They serve as teachers' aides when not on the buses or in cabs.

Contracts with the 23 bus and other carriers are let by the board's Purchasing Department. These carriers provide from one to as many as 260 buses and daily charges vary from a low of $49 to a high of $90, with an average of $86.88. The board requires a $2-million liability insurance coverage by the carriers.

EVALUATION

Scheduling and routing of buses and other vehicles have been left primarily to the major company with guidance from the Office of Director of Pupil Transportation. Computer techniques and data processing procedures to aid in planning of transportation activities are not being used.

The problem of transporting handicapped children is compounded by the varieties of handicaps and varying capabilities of schools and their staffs to handle them. A child with a particular handicap can be transported almost across the city to a special school fitting his or her needs.

The practice of using taxis to transport the handicapped from outlying areas to schools may be necessary. However, using meter rates is questionable. Although there is no choice in picking up the handicapped in front of their homes, the practice of driving normal children attending magnet schools from their homes is very questionable.

RECOMMENDATIONS

1. Discontinue the practice of transporting nonhandicapped children from and to their homes.

Nonhandicapped children attending the magnet, special schools, and those displaced due to school rehabilitation or overcrowding are picked up and returned to their homes. This involves 33 buses at a cost of about $75 each per day. There is a 12% to 20% state reimbursement to recover partial costs.

A solution would be to have the children gather at collection points, about five or six blocks from their home. With this arrangement, the number of buses involved can be reduced by eight or nine. In addition, it will help minimize the number in future expansion of the program.

The reduction of buses will save an estimated $108,000 annually under current arrangements and could cut future expenditures.

2. Remove the welfare attendants from vehicles transporting nonhandicapped school children from and to their homes or gathering locations.

The Board of Education has, in the past, established a practice of assigning welfare attendants to each vehicle transporting handicapped school children. This practice has been extended to the newly founded programs involving normal children who are transported to and from special schools and those displaced because of building programs. To eliminate unnecessary and excessive expenses, the board should discontinue the use of welfare attendants riding in those vehicles transporting normal children.

Benefits to be attained include a reduction of 33 attendants for an annual saving of $243,500. This will not affect the quality of transportation services. There will also be a cost avoidance realized when additional special schools are constructed and student enrollment increases. For instance, in 1973 it is planned to expand the Disney School enrollment from 240 to 1,440 children. This will require an increase of 30 buses with welfare attendants and represent a potential additional salary expenditure of $221,400. Annual savings will total about $465,000.

3. Renegotiate selected bus contracts.

A variation in transportation charges exists in the carrying of handicapped as well as normal students. It ranges from $49 to $90 per bus per day. There are such variables as type of handicapped children carried, length of routes, areas of congestion with regard to school location, and so on. However, there appear to be situations where different bus companies are doing about the same job as others for less money.

The Board of Education is purchasing and storing gasoline in underground facilities located in the yards of the bus operator under contract to supply most of the buses for the transportation of Chicago school children. This arrangement is not employed with any other bus operator under contract.

Therefore, a thorough investigation should be made by the Bureau of Transportation Services to determine if there can be a reduction in the cost of pupil transportation provided by various bus companies. It should investigate not only the rate structure for regular busing but also those rates assigned to special runs such as clinic visits.

Indices common to all operations with regard to costs per pupil, costs per pupil mile, types of runs and the like under comparable operating conditions should be developed. It should also determine why the bus company providing the major number of buses utilizes gasoline provided by the Board of Education while no other contractor takes advantage of this option to lower their costs.

It is difficult to arrive at a definitive dollar savings figure. However, by negotiating reduced costs of the higher bidders to $85 per bus per day, the annual saving would be approximately $222,000. At present, the three companies which would be affected by this rate reduction, supply about 268 out of a total of 390 buses.

4. Review periodically the economic feasibility of changing from leased bus service to full ownership.

Studies in the past have indicated it is more economical to contract with carriers than to purchase equipment and hire operators to transport pupils. The last review was made four years ago. Conducting such studies on a continuing basis will help keep the cost of this operation at its lowest.

5. Extend the time between acceptance of bids for pupil transportation and performance of contracts.

The one-month period involved between solicitation for bids and required performance does not allow all bus companies to bid on an equal basis. With the time involved in obtaining new equipment, it is virtually impossible for all except one firm to bid on the total pupil transportation package.

Soliciting bids on pupil transportation six months in advance would allow more time for them to prepare and return bids as well as secure the equipment required to meet the stipulated performance. This extension would result in greater competition and lower costs. The saving is undeterminable.

Pupil Driver Education

The driver education program in Chicago is administered by the Safety Section of the Bureau of Health, Physical Education and Safety. The program administrator is the safety education consultant. He is assisted by one clerk in the downtown office and by area administrators in the three area offices.

Classroom instruction is given in 55 public high schools. Driver training is handled in 20 education centers including one for handicapped pupils. These facilities operate in an extended program from two-to-four hours on regular school days, 12 hours on Saturdays and most holidays, and 12 hours daily, six days a week, during school vacations. The course is available to any legal resident of the district between the ages of 15 and 21 years who requests it.

Currently, there is a fully qualified staff of approximately 300 teachers who work in the program during nonschool hours and are paid the substitute teacher's rate. For fiscal 1972, there will be about 50,000 students accommodated in the classroom training program. Of this number, 35,000 will be from public and 15,000 from private schools. About 32,250 pupils will complete the practice driving phase.

The program uses some 208 automobiles. About 160 cars are donated by local dealers. An additional 48 vehicles are owned and maintained by the Chicago schools for emergency and supplemental use by the driver training program. The board pays for maintenance and for a changeover charge when the donated cars are returned to the dealers. Owned vehicles are depreciated over five years.

The driving centers use simulators and driving ranges to reduce the cost of individual training. Simulators are purchased and depreciated. One school has its own gas pump while others use credit cards.

The cost of the program in fiscal 1971 was slightly in excess of $2-million. Of this, $1.4-million was claimed for reimbursement from the state. Expenditures for 1972 are estimated to be the same with the state increase in reimbursement expected to cover all costs. The state repays the Chicago schools for expenditures not to exceed $10 for each student completing 30 hours of classroom instruction and an additional $40 for each pupil finishing the equivalent of six hours of practice driving. Classroom training is considered part of the physical education program.

EVALUATION

Chicago has an excellent driver education program operating at one of the lowest per-student costs in the state. For the most part, dealers are cooperative in donating cars. However, in 1968, the school board had to purchase a fleet of 48 cars because of problems in obtaining vehicles. This represents 25% of the total fleet which seems high. Therefore, the practice of buying cars should be investigated before any replacement vehicles are purchased. An emergency program could become permanent if not controlled.

Maintenance, changeover expenses, and insurance appear normal, although greater statistical analysis would aid the control of these items. Clerical administrative functions could use streamlining. Duplication of effort is apparent in the supplementary payroll functions and the computer programs used still require manual manipulation of figures. Staffing in the downtown office is insufficient. As a result, the administrator of the program is forced to assume full-time clerical responsibilities.

RECOMMENDATIONS

1. Contact manufacturers directly to increase the percentage of donated vehicles.

The Chicago schools currently own 48 driver training cars. This represents 25% of the automobiles used in the program. They were obtained for emergency purposes when it was difficult to get donations. This problem should not exist today.

Major manufacturers have historically supported the driver education program. At present, there is not an equal representation of all auto manufacturers due to various problems cited by local dealers. However, direct contact with the manufacturers should clear up any difficulties.

Equipping the program completely with donated autos would eliminate annual depreciation and maintenance expenses for an estimated saving of $48,000. This proposal has been made on a statewide basis, but applicable benefits to the Chicago school system are illustrated here.

2. Institute an analysis program for driver training administration.

The safety education consultant administers the driver education program. He and his staff must struggle to keep up with the clerical load required for reports to the state and payrolls. There is some duplication in these clerical functions. Forms which were developed for a small operation have not been adjusted as the system has grown. Statistical analysis of the program has not been implemented.

The Chicago school system has an exemplary driver education program. However, the administrator must be given time to coordinate it properly, arrange for automobile acquisitions, and cooperate in federal and state supporting projects.

Relief should be given to the administrator by obtaining adequate clerical help. In addition, steps should be taken to eliminate duplicate clerical functions and design procedures to provide adequate reports from the schools.

Given the proposed assistance, the administrator should be able to institute an analysis program to supervise program costs so driver education training can maintain its record of being basically self-supporting. Potential savings will offset the additional clerical costs.

3. Charge driver education pupils a nominal fee to recover vehicle operating costs.

Expenses for gasoline and oil, vehicle maintenance, insurance, and other operating costs represent very high annual out-of-pocket expenditures for the driver education program. In order to relieve the school system of this high cost burden, a nominal fee of $6 per year should be charged each driver education pupil.

Based on task force evaluation, the annual average expense per driver education pupil in Illinois for vehicle operation is $5.98. Application of the fee to the 32,000 pupils who completed the practice driving phase in 1971, would have offset the cost of the driver training program by $192,000. This proposal has been made on a statewide basis, but applicable benefits to the Chicago school system are shown here.

Insurance

Three main insurance programs are carried by the Chicago Board of Education. The first includes a comprehensive public liability policy for premises and operations. Coverage includes personal injury, professional liability, operation of motor vehicles, and contractual liability.

The policy insures all properties owned by the board whether used for school or other purposes. This includes rented properties, premises leased to others, and 235 motor vehicles, such as trucks, vans, and driver education cars. Buses are not covered as these are rented. An umbrella public liability policy for $19-million excess over the $1-million primary coverage is also part of the program.

Several hundred insurance companies were sent specifications on the public liability coverage required by the board. These indicated that bidding companies must have a Best's financial rating of AA or better, and that the board reserved the right to reject any or all bids or any portion of any bid. One agency submitted a bid on behalf of a number of companies to write the coverage in layers which was accepted.

The second of the three coverages is the catastrophe insurance policy carried on buildings and contents. In 1968, bids on this coverage were solicited from all major insurance carriers and most of the larger agents and brokers in Chicago, but only one offer was received. Coverage was finally obtained for losses of a catastrophic nature. Under the present agreement, the board self-insures the first $1-million and the insurers cover the next $20-million of damage at any one location. Only two of the board's properties could possibly have a valuation in excess of $21-million.

A third policy carried by the board is accident insurance. It covers payments for medical services and provides accidental death and dismemberment benefits for participants in interscholastic athletics, volunteer workers, practice teachers, and social workers.

None of these people are employees of the board nor are they paid any salary. At present, the Director of Employee Benefits is asking the carrier for an experience report.

In addition to the three main coverage areas, fire, extended coverage, and sprinkler leakage insurance is carried on two board properties. This, in part, duplicates coverage provided under the catastrophe policy.

Workman's compensation claims are not covered by insurance. Instead, they are administered by the board's Law Department and paid out of budgeted funds. No excess insurance is in effect. Such protection is normally carried by self-insurers in the private sector.

The board has some $3.5-million in data processing equipment at its downtown location. No insurance is carried on this equipment or on boilers or other pressure vessels. The board paid the following amounts during fiscal 1970: liability insurance premiums — $997,800; group hospitalization — $6.69-million; group life insurance — $341,315; and workmen's compensation claims — $435,325. Invoices for insurance premiums are reviewed by the board's Committee on Insurance and then submitted to the board for authorization to pay.

At present, 47,000 full-time employees on the Chicago Board of Education are eligible for employee benefits. These insurance benefits consist of hospitalization and major medical coverage for employees and their families as well as a term life program. The 1972 appropriation for the hospital-major medical plan was set at $11.5-million, but the board's cost, because of increased rates, will be closer to $16.5-million. Term insurance in the amount of $2,000 is provided each employee. Long-term disability is offered under the pension plan for those personnel employed 10 years or more.

EVALUATION

Consolidation of the employee benefits and risk management insurance functions is unusual. This approach fixes responsibility for all insurance matters in one office and under one administrator. However, the dissimilarity of the functions may make this combination inefficient.

The comprehensive public liability policy of $1-million combined with the umbrella coverage of $19-million is a good program. The board, with its annual budget of approximately $800-million, could be a target for large lawsuits.

Fire, theft, glass breakage, and collision coverages are not carried on the trucks or vans owned by the board since losses would be relatively modest. They should be eliminated on the driver training autos as well. However, fire insurance should be provided if there is a concentration of these cars in any one location.

The catastrophe insurance coverage on buildings and contents with a $1-million deductible is a good start on a physical damage insurance program. Accident insurance for participants in interscholastic athletics, volunteer workers, practice teachers, and social workers would appear to be a service-type policy. Therefore, the percentage of premium charged by the insurer will determine whether or not the coverage is worthwhile.

Workmen's compensation as handled by the board's Law Department appears to be an efficient operation. However, excess insurance should be provided to cover a serious accident.

Most firms carry all risks insurance on their data processing equipment. The board has $3.5-million of equipment for which no insurance is carried. In addition, insurance is not carried on boilers or other pressure vessels. Many firms buy such coverage for the inspection services rendered by the carrier.

The hospitalization-major medical plan carried by the board is in line with those carried by most commercial firms. Costs for single and family plans are also comparable.

While many firms offer disability protection only to long-term employees, the trend is to provide it to all employees on a contributory basis. Under the board's present pension plan, long-term disability benefits for employees with as much as 15 years approximate 25% of the employee's salary. This amount, even with social security payments, will result in a very small disability pension.

RECOMMENDATIONS

1. Increase the administrator's staff by at least one person.

Three persons to handle employee benefits and advise on claims for more than 47,000 employees is not sufficient. Additionally, the administrator is responsible for the tax-deferred pension program and the risk management insurance function.

To properly distribute the work load another administrator should be hired. The annual cost is estimated at $15,000 including fringe benefits.

2. Assign administration of public liability claims to the Law Department.

This department is already handling workmen's compensation claims, paying them out of budgeted monies. In the same way, it could investigate negligence claims against the board and pay losses from budgeted public liability and umbrella funds. The board should purchase an excess policy which would pay individual losses over $50,000 and all claims after an aggregate total loss of $400,000 is reached in any one year.

Estimated claims of $250,000 plus administrative costs will result in total annual expenditures of $400,000. Administration of claims could be handled by one attorney and two clerks. The current premium cost is $449,000. Thus, the potential annual saving is conservatively estimated at $49,000.

3. Cancel the fire, theft, and collision insurance paid by the board on driver training cars.

At present, most driver training cars are provided by local automobile dealers. The board pays for fire, theft, and collision insurance on the autos. This means that the premiums charged must cover the losses incurred plus approximately 40% for the carrier's administrative costs and profit margin. If the board were to indemnify the dealers directly for any losses, it could reduce its total cost by about 40%. On a $30,000 premium, this would amount to an annual saving of $12,000.

4. Prepare specifications and negotiate insurance contracts with qualified local agents, brokers, and insurance companies.

Currently, the board sends out hundreds of insurance specifications on a cold canvass basis. It would be more efficient to select certain knowledgeable agents or brokers to procure bids from specified insurers.

Each agent should be allowed to discuss the board's requirements with the Director of Employee Benefits. The latter should request the agent to obtain a bid from his strongest market. This proposed source should be disclosed to the director so he can direct other agents to different companies. In this way, several competitive bids would be received. The annual saving to be achieved cannot be estimated at this time.

5. Require a specific policyholder rating for casualty insurance companies and a "recommended" rating for life insurance carriers bidding for board coverages.

A competent insurance reporting service assigns ratings to indicate the financial resources of various carriers. It has been a board practice to require a rating of AA or better before a company is allowed to submit an insurance bid.

However, a more important indicator for the board's purposes would be the policyholder ratings which range from A+ to C. Therefore, a policyholder rating minimum of A+ or A should be established for casualty companies. In addition, a "recommended" rating should be required as a minimum for life carriers.

6. Require liability clauses in the repair contracts.

The board may be subject to liability suits under current repair contracts as it is not furnished with certificates of insurance by contractors.

In letting repair contracts, the Chicago Board of Education should require:

- Hold harmless clauses in the contract.
- Certificates for owners protective liability, contractors protective liability, workmen's compensation, and public liability insurance.

Commercial firms follow this practice and such a liability clause would cover the board in the event of a lawsuit.

7. Renegotiate coverage and premiums on catastrophe insurance.

When the catastrophe insurance was purchased, a tight insurance market prevailed. This has loosened somewhat and, as no claims have been filed against the policy, schools are no longer poor risks.

Some downtown buildings carry a fire and extended coverage rate of $0.07 per hundred with no deductible. Accordingly, it would seem that the current rate for fire, extended coverage, and vandalism and malicious mischief with a $1-million deductible should be lowered at renewal. In 1970, the primary carrier received $400,000 for $15-million in primary coverage. If the rate could be reduced from $0.0323 to $0.02, the premium savings would be $100,000 per year.

8. Review the feasibility of administering accident insurance claims within the Law Department annually.

The procedure for managing claims for this coverage appears similar to that of workmen's compensation which is already handled by the Law Department. Upon renewal in September 1972, premiums should approximate claims experience. If the insurer charges too high a percentage of the premium for its services, the Law Department should consider assuming administration of the claims. This change could provide an annual saving of $31,000 based on current premiums. This amount is not claimed.

9. Cancel the duplications in coverage which exist on two board properties.

Fire, extended coverage, and sprinkler leakage insurance is carried on the school and warehouse at 31st Street and Kedzie Avenue as well as on the Chicago Parental Schools. This coverage is duplicated under a catastrophe policy which insures all schools in the district at a much lower rate. In the event, the policies are not canceled, they should be reviewed and amended so all of them will have the same terms, conditions, and rates. However, cancellation of the duplicate policies will provide an annual saving of $25,000.

10. Cancel physical damage insurance on board-owned automobiles.

In specifying coverage for the master policy, the board elected not to include physical damage to automobiles. However, three separate policies covering 12 automobiles were issued.

These physical damage insurance policies should be canceled as they do not offer significant benefits to the board. The annual saving in premiums would be $7,000.

11. Place excess insurance on workmen's compensation claims over $1-million.

The recommended coverage would give protection against catastrophic situations where many employees might be hurt or where several serious accidents depleted the workmen's compensation appropriation. The estimated annual cost would be $35,000 for coverage compatible with the comprehensive public liability policy.

12. Insure valuable records and board-owned data processing equipment.

No insurance is carried on the board's data processing equipment. Also, there is no coverage for loss of valuable records or the expense of operating under emergency conditions. Therefore, the board should obtain insurance to cover such losses in excess of $1-million in any one occurrence.

13. Include boilers, pressure vessels, and other types of boiler machinery in the catastrophe insurance policy.

At present, the board does not carry boiler and machinery coverage. Inclusion of boilers and the like in the catastrophe policy would provide protection for any one loss over $1-million. While such accidents occur infrequently, they are often very costly. Additional premium costs are not estimated.

14. Establish a safety committee at each school site to make regular inspections.

One of the best ways to reduce insurance cost is to eliminate claims. The business community has recognized the value of safety committees for years, but the schools are not utilizing this tool. Recently, the federal government enacted the Occupational Health and Safety Act which imposes fines for violations of federal safety standards. Public schools are exempt from this act, but should follow the standards.

Most schools rely entirely upon the engineering staff of the insurance carriers for suggestions relating to safety. These visits are infrequent and cannot take the place of a locally administered safety program. Hazardous conditions should be corrected immediately. Some local person or committee should be responsible for seeing that trash does not accumulate, water is promptly mopped up, broken glass is removed, and other safety hazards are corrected.

The committee membership, consisting of a building engineer, a custodian, an employee of the business office, a teacher, a student, and a member of a local fire department, could be rotated frequently to increase the awareness of safety. Meetings would be held at least monthly and recommendations on safety would be reduced to writing and referred to the principal with a copy to the district superintendent.

Health Services

The Bureau of Health Services is responsible for providing medical and health services required under the code to students and employees of the Chicago Board of Education. The bureau provides pre-employment medical examinations for personnel hired by the board, and meets the health needs of school children. It also administers federally funded programs related to health services and recommends a total health care program for the youth of Chicago.

The bureau operates under the Division of Pupil Personnel Services and Special Education. Total expenditures in fiscal 1971 for programs administered by this unit approximated $4.3-million. This was spent as follows: federal programs $1.07-million, medical examination $120,000, vision and hearing conservation $580,000, inoculations and teacher/nurses $2.013-million and administration and other programs $517,000.

Overall administration of the bureau is the responsibility of the Medical Director and his assistant. A group of clerical personnel assist with day-to-day record maintenance functions.

A medical examining section provides pre-employment examinations for teachers, civil service personnel, and temporary employees. It is staffed by one full-time and several part-time physicians who examine some 20,000 persons annually. Medical records are kept and patients scheduled by a staff of five clerks.

The bureau administers approximately 18 health programs which are funded by the Chicago Board of Education and various government agencies. Carried out at school and district levels by 183 certified teacher/nurse and approximately 175 civil service personnel, these programs involve:

- Hearing and vision testing for some 300,000 school children.
- About 200,000 inoculations for major diseases.
- Physical examinations provided for over 10,000 childen and 22,000 medical examinations for teachers and service personnel.

The Model Cities and Head Start health programs are fully funded by the federal government and the Elementary and Secondary Education Act. They are designed to provide physical examinations for eligible children with appropriate follow-ups initiated by board personnel. In the current ESEA programs, a teacher/nurse consultant coordinates the health services provided.

Pediatric teams consisting of one licensed physician, five nurse/pediatricians, one laboratory technician, and two health aides serve designated schools in each of the three school areas. Under the direction of the physician, the team reviews pupils' health records and histories and conducts medical examinations to identify health defects. Periodically, the team holds a series of meetings with the principal, parents, and teacher/nurse. The purpose is to discuss specific pupil cases and determine the best method of handling individual health problems.

In addition, ESEA-funded dentists supplement the Chicago Board of Education's dental program by providing prophylaxis, x-rays, prosthetic, endodontic, and pedodontic service in their offices. They also supply consulting services for special dental problems of eligible children. Each year, some 10,000 ESEA-eligible children are given medical and dental care at a cost of approximately $60 per student.

Similar medical programs are conducted under the federally funded Model Cities and Head Start programs. The Model Cities program serves some 9,000 students at a cost of about $44 each. The Head Start program serves approximately 3,000 students at a cost of $70 per child.

To provide intensive follow-up for children with health defects, a group of part-time consultants from the fields of ophthalmology, optometry, endocrinology, psychiatry, and otology review the medical records involved and recommend appropriate follow-up procedures. The teacher/nurses usually contact the parents to encourage them to attend to the child's medical problems.

Hearing and vision screening tests are provided for children in kindergarten, first, fifth, and ninth grades by 31 vision and 31 hearing testers. These people visit schools on a scheduled basis and perform tests which can identify potential defects. An audiologist or consulting ophthalmologist reviews the tests and assists in assigning classroom positions to children with hearing and vision defects. Recommendations for further medical observation are made for those with more severe problems. Each of the tests is performed and administered for approximately $1 per student.

Teacher/nurse teams provide inoculations for children in areas which need this service. Selected schools are visited during the school year to provide inoculations for kindergarten, first, fifth, and ninth grade students and others on an as-required basis.

When a potential epidemic exists, these teacher/nurse teams are used to administer inoculations to the affected children.

EVALUATION

The health services program in the Chicago schools has been designed to meet the requirements of state regulations and supplement available public health agency programs. The approaches taken in developing these services are innovative and represent broad departures from programs provided in other school systems surveyed.

However, several current administrative procedures limit effective implementation of the medical programs. Administration of these services lacks efficient management coordination and competent personnel to effectively maintain necessary medical and administrative records.

RECOMMENDATIONS

1. Centralize the administration of the health care programs.

The Bureau of Health and Medical Services reports to the Assistant Superintendent of Pupil Personnel Services. Teacher/nurses report to school principals and through area and district offices. As a result, medical problems, particularly those related to communicable diseases, cannot be handled expeditiously. Further, implementation of medical programs is restricted due to the many communications channels which exist.

To provide better supervision of personnel and ensure uniform implementation of the health care programs, the health services function should operate autonomously. Therefore, all personnel associated with health and medical services should report to the Medical Director through supervisory personnel at the district and area levels.

The recommended structure will provide the Medical Director with the means to establish health programs which meet the needs of the children. It will also ensure that the necessary flexibility exists in order to allow the director to react to emergency health situations as they arise.

2. Hire registered nurses instead of teacher/nurses for health care programs.

There are 183 certified teacher/nurses employed in the existing federal- and board-sponsored health programs. These nurses do not teach classes. Their annual compensation is approximately $2.75-million or about $15,000 per nurse. This represents more than 50% of the Chicago Board of Education's total expenditure for medical services.

Registered nurses can be employed at a lower rate and, where the need is limited, hired on an hourly basis. Use of registered nurses throughout the school system would save the board approximately $778,000 per year, based on an estimated annual salary of $10,000 each for the nurses. There would be an additional saving of $147,000 per year on federally funded programs. The proposed personnel would be able to provide the services currently provided by certified teacher/nurses.

3. Provide an office manager for the Bureau of Medical and Health Services.

Minimal supervision is now provided for the 11 clerical employees in the central office. These personnel prepare vouchers, handle medical records, and process statistical information for medical review.

It is important that adequate supervision be provided for the central office staff. Maintenance of confidential medical records as well as voucher preparation procedures need improvement. Further, numerous statistics are now compiled on various medical programs in a disorganized manner.

An office manager is needed to ensure adequate supervision of the central office staff, direct preparation of meaningful statistics, provide proper maintenance of confidential medical records, and oversee the preparation of vouchers. This person would also assist the Medical Director in the administration of present health care programs and the development of new services. While implementation will require an additional expenditure, it can be offset by potential reductions in the clerical staff.

4. Consolidate all medical functions within the Bureau of Health Services.

Some of the health services provided by the Chicago Board of Education do not report to the Bureau of Health Services. To ensure a comprehensive, integrated program of student health care, it would seem that all such programs should be developed and administered by the Medical Director and approved by the General Superintendent. Implementation will prevent duplications of effort and provide improved health services.

5. Utilize public health services wherever possible.

Where possible, public health agencies should be utilized to perform health services for the school system. In some school systems surveyed, adequate programs are being provided by public health agencies at no cost to the district.

Present board programs, such as inoculations, could be administered by these local agencies. If only 25%

of the present programs were handled by local agencies, approximately $1-million would be saved annually by the Chicago Board of Education. Most of these costs would be transferred to the public health agencies.

6. Evaluate the manpower requirements for doctors and nurses in the current medical program.

Physicians and nurses are currently used to perform routine duties which could be carried out by other employees. They should be utilized only for professional functions.

As part of the overall specifications for health care programs in Chicago's public schools, an evaluation should be made of the medical manpower required for implementation. Once specific health care programs are defined, alternate methods of staffing should be evaluated by the Medical Director. He would then be responsible for recommending proper manpower levels for each health care program approved by the board.

Attendance Services

School Attendance is a division of the Bureau of Pupil Personnel Services of the Chicago Board of Education. The bureau is responsible for implementing those sections of the Illinois School Code relating to compulsory school attendance. Its work covers taking the necessary steps to return the child to regular attendance in his or her school, including legal action if the child or parents have willfully failed to comply with the provisions of the code.

Duties are carried out at the district level by 214 civil service certified school attendance officers. Each officer is assigned to one or more schools in a district. In addition, 27 of these employees have been designated senior officers who, aside from their regular assignments, counsel other attendance officers within their district.

Administrative and recordkeeping functions are performed at the Chicago Board of Education offices by 15 employees including the bureau head. They maintain appropriate statistical and administrative records and provide the board's attorney with information needed to prosecute truancy cases. During the last school year, about 2,500 cases were referred to the courts.

The administrative functions are divided between a field and a court section. The field section consists of seven employees. It secures and trains new attendance officers, tabulates investigations, maintains records of identified truants, develops lost child reports, and administers the truant officers' transfer policy.

The court section also has seven employees. It executes case reports initiated by the schools and forwards them to the central office. In cases requiring special educational facilities, transfers to social adjustment schools are issued to the requesting schools for execution by the truant officer. In those cases requiring prosecution in either Municipal or Juvenile Courts, the attorney and his staff prepare the documentation and other papers necessary to bring cases to trial. The court section pursues the case until the child is returned to regular attendance or committed to the Chicago Parental Schools.

These facilities are operated by the Chicago Board of Education as resident campus institutions for boys and girls. Their purpose is to encourage and stimulate regular school attendance.

The fiscal 1972 appropriation for attendance services is approximately $2.8-million or about $5 per student. This amount understates the cost since the accounting system does not allow an allocation of salaries for attendance teachers or for part-time work done by other school employees. Prior to 1972, 61 certified attendance teachers were employed by the board. These positions were discontinued during the budget reevaluation period and the duties absorbed by individuals at the school level. In addition, schools which have no regular attendance teacher use other personnel to monitor school attendance.

Each school is responsible for taking attendance, identifying reasons for absences, and reporting absences on a timely basis to the school principal. Written guidelines have been prepared recommending a method for utilizing attendance officers, but they have not been successfully implemented. The principal prepares a list of students with unexplained absences for the attendance officer. The officer then visits the home of each student to identify the cause of the absence, reporting his findings to the principal. During the 1970-1971 school year, some 230,000 investigations were made by the attendance officers in the district.

EVALUATION

Within the framework of the present Illinois School Code, the functions of enforcing school attendance in Chicago's public schools can be described as marginally effective. Since nonattendance and truancy are caused by a variety of social problems, the current staff cannot fully enforce the attendance requirements of the code. Thus, an increase or decrease in attendance officers will not significantly alter the overall performance of this group.

Certain rules regarding transfer of personnel between districts and areas make it difficult to alter attendance officer assignments to provide better utilization of personnel. For example, in 1971, some attendance officers handled up to 2,500 cases or about 12 per day while others averaged only one case a day. This wide variation indicates that relocation of personnel might provide a more effective overall school attendance program.

RECOMMENDATIONS

1. Centralize administration of the school attendance function and authorize the position of supervisory attendance officer in the districts.

Under the current decentralized organization structure of the Chicago Board of Education, attendance officers report directly to school principals. Senior truant officers are located in each district, although they do not perform in a supervisory capacity. Central office personnel exercise insufficient authority over these officers and, as a result, have little control over their activities.

In order to provide better utilization of available personnel, ensure uniform implementation of the school attendance program, and establish more effective attendance officer supervision, the Division of School Attendance should operate autonomously.

The central office should be responsible for identifying the need for attendance officers. It should have the authority to use all available officer personnel in those areas with the greatest need.

Programs should be implemented and administered through supervisory officers at the district or area level. These employees should assist in training new attendance officers.

Implementation of this recommendation should not require an additional expenditure, as present staff can absorb the additional work. It should increase the output of the attendance officers since they will be located in areas with the most urgent need.

2. Revise the manpower requirements for school attendance officers.

There are 214 attendance officers employed by the Chicago Board of Education. While this is less than in prior years, the reduction resulted from budgetary pressure rather than school attendance improvement. In the 1970-1971 school year, approximately 230,000 cases were referred to 225 attendance officers. This represents an average of about 1,030 cases per year for each officer. However, several officers handled more than 2,000 cases during the year. Others processed considerably less than the average number.

The board should review present expenditures for school attendance services and make program revisions to improve the overall efficiency. The effectiveness of school attendance personnel should be carefully controlled and appropriate changes made to place the officers where the need is greatest. Further, the Director of School Attendance must be given the authority to maintain a mobile work force which can be reassigned to meet emergency situations.

By scheduling the work so each officer can handle an average of 1,500 cases per year, the division can take care of the present volume of referrals with 153 attendance officers. This would provide an annual savings of approximately $624,000 per year through elimination of 61 employees.

3. Eliminate many of the forms and statistical reports prepared in the Division of School Attendance.

The Division of School Attendance utilizes many forms and develops voluminous statistical data. Most of the information is prepared by attendance officers and forwarded to the central office for processing. A staff of six full-time clerks prepare daily, weekly, and monthly summaries by officer, school, district, and area.

A review of these reports and forms should be made to identify the information necessary to support the specified program of school attendance. In addition, an economical method of capturing necessary data should be defined. This would provide a means of developing more meaningful information at a lower cost. The review should be performed by the board's Systems Department. The one-time cost would be $2,000. The annual saving to be achieved through a reduction of 50% in the clerical staff would be $26,000.

Section IV
Digest of Chicago Recommendations

Governor's Commission on Schools
Business Management Task Force

Digest of Recommendations

Administration

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Delegate many of the board's operational functions to the staff.	Local Board		
2. Reduce the number of board committees.	Local Board		
3. Provide a training program for new board members.	Local Board		
4. Modify the code to permit the school board to hold executive sessions.	Legislative		
5. Establish the position of Deputy Superintendent-Business Management.	Local Board	Annual Cost	$35,000
6. Establish a group comprised of persons from the business community to serve on a full-time loan basis for a period of one year or longer to assist the Deputy Superintendent-Business Management in renovating Chicago's school administrative system.	Administrative-Local		
7. Raise amount of invoice requiring board approval to a more realistic amount.	Legislative		

Federal-State Aid Programs

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Reassign responsibility for preparation of claims to the Department of Government Funded Programs.	Local Board	Annual Saving	$18,000
2. Reduce the span of control in the Department of Government Funded Programs.	Local Board	Annual Cost	$49,000
3. Change the name of the Department of Government Funded Programs and position titles in the department.	Administrative-Local		
4. Reassign administrative responsibility for programs now outside the Department of Government Funded Programs to that agency.	Local Board		
5. Monitor and control the cash flow related to government programs.	Local Board		
6. Develop a uniform format for government program budgets which is satisfactory for presentation with the program proposal and detailed budgetary control.	Administrative-State		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
7. Implement a computerized budgeting, cost control and information system for use by the Department of Government Funded Programs.	Local Board	Annual Saving	$354,000
8. Proceed with implementation of the property control system initiated by the Department of Government Funded Programs to cover equipment received under government grants.	Local Board		
9. Extend the scope of the board's financial examination by external auditors to include a test of fixed assets.	Local Board		
10. Centralize and mechanize property control and accounting in the Division of Property Control, extending the system which was developed by the Department of Government Funded Programs to all board property.	Local Board	Annual Saving	$35,000

Systems and Procedures

1. Establish an in-house systems task force.	Local Board	Annual Cost	$98,000
2. Establish a bureau for manual systems and procedures, including a trained staff in paperwork simplification and forms control functions.	Local Board	Annual Cost	$60,000
3. Clarify the organizational structure of the Systems Analysis and Data Processing Department.	Administrative-Local		
4. Upgrade personnel by hiring experienced systems personnel and programmers from outside the system.	Local Board		
5. Solicit bids from local banking institutions for payroll processing.	Local Board	Annual Saving	$130,000
6. Encourage the staff to participate in professional meetings and seminars.	Administrative-Local		
7. Conduct a review of telephone costs.	Administrative-Local	Annual Saving One-Time Cost	$125,000* $13,000*

Data Processing

1. Clear subwarrants or vouchers through the banking system rather than City Treasurer.	Local Board	Annual Saving	$60,000
2. Implement more powerful features of the equipment's operating systems.	Administrative-Local	Annual Saving	$20,000
3. Introduce remote testing.	Administrative-Local		
4. Minimize clerical activities of operators.	Administrative-Local		

*Included in statewide figures

Accounting and Auditing

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Install a new accounting system.	Local Board	Annual Saving One-Time Cost	$1.02-million $500,000
2. Establish a central receiving point at each school unit.	Administrative-Local		
3. Implement an auditing procedure to pinpoint schools which are not processing receiving reports promptly.	Administrative-Local		
4. Speed up payments of vendors' invoices.	Local Board	Annual Saving	$320,000
5. Eliminate the detailed checking of the attendance reports received by the Bureau of Payrolls.	Local Board	Annual Saving	$82,000
6. Establish a procedure whereby all sick, personal, and vacation days are determined and assigned at the same time.	Administrative-Local	Annual Saving	$14,000
7. Establish a Division of Lunchroom Accounting in the Bureau of Accounting.	Local Board	Annual Saving	$10,000

Financial Management

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Participate in the pooled cash and pooled investment fund to provide immediate use of revenues and optimize earning power of assets.	Legislative	Annual Income	$7.1-million*
2. Issue lower cost general obligation state bonds in lieu of district special revenue bonds to finance capital improvements.	Legislative	Annual Saving	$620,000*
3. Discontinue the issuance of local short-term notes and replace with state-issued short-term general obligation notes.	Legislative	Annual Saving	$4.16-million*
4. Change payment plan for local property taxes to a pay-as-you-go basis, with 1/12 of the tax due on the fifteenth of each calendar month, beginning January 15.	Legislative	Annual Income One-Time Income	$1.13-million* $99-million
5. Pay to the Chicago school system its portion of all penalties collected for the late payment of real estate and personal property taxes levied.	Legislative	Annual Income	$1.45-million*
6. Increase the penalty for late payment of real estate and personal property taxes to 2%.	Legislative	Annual Income	$1.45-million*
7. Eliminate the practice of placing in escrow those taxes paid under protest.	Legislative	Annual Income	$1.8-million*

*Included in statewide figures

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
8. Change the forecast percentage of uncollectible tax levies to reflect recent years' experience.	Local Board		
9. Establish a treasurer's position that reports directly to the Chicago Board of Education.	Local Board		
10. Convert Chicago's accounting year to a September 1 to August 31 basis.	Legislative		
11. Revise budgeted positions to reflect actual job requirements.	Local Board		
12. Reduce the number of published final budgets.	Administrative-Local	Annual Saving	$5,000

Personnel

1. Update the current job descriptions for administrative positions on a continuing basis.	Local Board	Annual Cost	$15,000
2. Provide the Department of Personnel with complete, computerized data on civil service personnel.	Administrative-Local	Annual Saving	$55,000
3. Prepare manuals for civil service positions to ensure uniform procedures and aid in training new employees.	Administrative-Local		
4. Prepare job evaluation guidelines for rating performance.	Administrative-Local		
5. Provide funds to implement the Administration Compensation Plan adopted by the board in March 1971.	Local Board	Annual Cost	$12,000
6. Replace temporary employees with civil service personnel.	Local Board		
7. Institute a salary adjustment program based on merit for all civil service employees.	Local Board	Annual Saving	$1.8-million*
8. Employ experienced personnel to head technical areas and fill administrative positions.	Local Board		
9. Establish a work measurement program.	Local Board	Annual Saving One-Time Cost	$8.2-million $1.5-million
10. Assign direct responsibility for subordinate's work performance to department heads.	Administrative-Local		
11. Establish a formal grievance procedure for civil service employees.	Administrative-Local		

*Included in statewide figures

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
12. Permit discharge of unsatisfactory employees upon recommendation of a supervisor with approval from the Department of Personnel, subject to appeal to the Civil Service Commission.	Local Board	Annual Saving	$304,000
13. Establish a compulsory retirement age of 65 for civil service employees.	Local Board		
14. Eliminate the board rule which makes failure to pay on the part of an employee a just debt cause for dismissal.	Local Board	Annual Saving	$9,000
15. Initiate a program to communicate benefits to employees.	Local Board	Annual Cost	$25,000
16. Modify the Chicago Civil Service Code to permit employees to be paid on an hourly basis for time actually worked.	Administrative-Local	Annual Saving	$1.59-million
17. Engage professional employee relations experts and negotiators.	Local Board		
18. Negotiate employee contract agreements to be effective for not less than two years.	Administrative-Local		
19. Make hospitalization-major medical coverages partially contributory.	Local Board		
20. Participate in a statewide single policy for group health and accident, major medical, and group life programs.	Legislative	Annual Saving	$1.15-million*
21. Offer group life insurance to employees in significant amounts in line with their duties, responsibilities, length of service, and compensation.	Administrative-Local		
22. Adopt a pay-as-you-go method for funding employer contributions to the teacher retirement plans.	Legislative	Annual Saving	$7-million*
23. Adopt investment policies currently followed by a majority of private pension and retirement funds.	Legislative	Annual Saving	$7.4-million*

Public Relations

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Organize the central office public relations staff to provide a positive communications program.	Local Board	Annual Cost	$400,000
2. Increase the area staffs.	Local Board	Annual Cost	$55,000
3. Initiate a comprehensive community relations program involving community councils, parent / teacher organizations, and other local groups to improve cooperation regarding vandalism and other associated matters.	Administrative-Local		

*Included in statewide figures

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
Purchasing and Warehousing			
1. Realign responsibilities and relocate the staff of the Bureau of Purchases.	Local Board	Annual Saving	$275,000
2. Increase annualized purchase contracts by commodity groups.	Administrative-Local		
3. Seek additional potential vendors and bidders in board purchases.	Administrative-Local		
4. Expand the role of Central Purchasing in value analysis.	Administrative-Local		
5. Prepare reports and forecasts which reflect actual performance of the Bureau of Purchasing.	Administrative-Local		
School Food Service Programs			
1. Decentralize the Bureau of Lunchrooms.	Local Board	Annual Saving	$162,000
2. Adopt a Fully Equal Food Service Program in all pre-kindergarten to grade 8 schools.	Administrative-Local	Annual Saving	$8-million
3. Improve the variety of Prepackaged Convenience Meals and Nutra-Pak modes to enhance the acceptability of the proposed Fully Equal Food Service Program.	Administrative-Local		
4. Cancel all service changes to higher cost modes scheduled for pre-kindergarten to grade 8 schools as well as additions to high school kitchens planned in support of mobile hot food service (MHFS).	Administrative-Local	One-Time Saving	$4.4-million
5. Authorize the establishment of three food manufacturing plants and consider contracting for construction and operation with an appropriate supplier.	Local Board	One-Time Cost	$430,000
6. Contract for the management of lunchroom operations in newly constructed high schools and existing facilities whenever feasible.	Local Board	Annual Saving	$500,000
7. Substitute teachers' aides for lunchroom personnel in the pre-kindergarten to grade 8 schools.	Administrative-Local	Annual Saving	$2-million
8. Charge current high school lunchroom users for a fair share of facility depreciation and overhead.	Administrative-Local	Annual Income	$1-million
9. Improve operating procedures in high school lunchrooms.	Local Board	Annual Saving	$1.02-million
10. Eliminate abuse of free meal authorization practices.	Administrative-State		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
11. Establish effective management and cost control reporting.	Administrative-Local	Annual Saving	$253,000*
12. Establish job descriptions for all food service personnel.	Administrative-Local		

Textbooks

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Place all audio-visual hardware in burglar-proof storage.	Local Board	Annual Saving One-Time Cost	$205,000 $600,000
2. Establish a standard inventory procedure for text and nontext materials at each school.	Administrative-Local		
3. Establish an inventory control for instructional materials at the district level.	Administrative-Local		
4. Utilize teacher evaluations of instructional materials.	Administrative-Local		
5. Eliminate text and nontext catalogs.	Administrative-Local	Annual Saving	$63,000
6. Establish expenditure accounting for educational materials.	Administrative-Local		
7. Replace textbooks based on their physical usability or educational value.	Administrative-Local	Annual Saving	$500,000
8. Initiate textbook fund reallocations quarterly based on student population changes.	Administrative-Local		
9. Increase the current usage of paperback textbooks.	Administrative-Local	Annual Saving	$15,000*
10. Establish a policy to collect monies from students for lost or damaged educational materials.	Local Board	Annual Income	$50,000
11. Combine the Bureau of Instructional Materials with the Department of Curriculum and eliminate warehouse samples of instructional materials.	Local Board	Annual Saving	$86,000
12. Combine educational material evaluations with curriculum revisions.	Administrative-Local	Annual Saving	$48,000
13. Establish use and verification of charges on bills of lading and postage rates for educational materials.	Administrative-Local		

Library Books

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Place all audio-visual hardware in burglar-proof storage.	Administrative-Local		
2. Make library fund reallocations quarterly based on student population changes at each school.	Administrative-Local		

*Included in statewide figures

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
3. Discontinue rebinding library books.	Administrative-Local		
4. Establish a board policy to collect funds for lost or damaged books.	Local Board	Annual Saving	$46,000
5. Establish a minimum inventory of library books and nonbook educational materials.	Administrative-Local		
6. Establish a method to monitor the price of elementary books bought through the automated broker purchasing system.	Administrative-Local		

Building Operation and Maintenance

1. Initiate immediate action within the Board of Education to regain disciplinary control of the individual schools by taking firm measures and establishing detailed policies and administrative procedures.	Local Board		
2. Develop and conduct a professional orientation program for educational and operating personnel covered in the previous recommendation.	Local Board	Annual Saving	$156,000
3. Provide the area chief engineers with authority to suspend personnel under their control.	Local Board	Annual Saving	$2.77-million
4. Permit the present work force to perform more of the repair and maintenance work required in their school buildings.	Administrative-Local	Annual Saving	$1.06-million
5. Transfer the Division of School Electrical Repairs from the present downtown location to the 31st Street Shops.	Administrative-Local	Annual Saving	$51,000
6. Reduce the number of district supervising engineers from 25 to 17.	Administrative-Local	Annual Saving	$239,000
7. Formulate and install a direct labor timekeeping and reporting system for all of the 31st Street Shops' personnel including electricians.	Administrative-Local	Annual Saving	$620,000
8. Assign direct responsibility of operating personnel to the Director of Plant Operation and Maintenance to conform to the present policy of separation of administrative responsibility between the operating and educational function.	Administrative-Local		
9. Hire a trained professional industrial engineer to direct the activities of an enlargement of the present Methods and Standards group, reporting directly to the Assistant Superintendent of Schools — Operation Services.	Local Board	Annual Saving	$9.42-million

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
10. Establish a job costing system based on actual charges for maintenance and repair work done by the 31st Street Shops and the electricians.	Administrative-Local		
11. Raise the authorization of expenditure level for area chief engineers, district supervising engineers, engineer-custodians, and comparable levels.	Local Board		
12. Transfer the function of property control to the 31st Street Shops and develop a computerized program to maintain furniture and equipment records.	Administrative-Local	Annual Saving	$53,000
13. Employ outside janitorial services in a representative sampling of schools in the Chicago system.	Administrative-Local		
14. Introduce a professional work measurement program and revise existing staffing guidelines to obtain more meaningful and functional standards in the operating section of schools.	Administrative-Local		
15. Analyze and audit electric power, water, and natural gas utility bills and contracts periodically to determine proper rate applications and billings.	Administrative-Local	Annual Saving One-Time Cost	$275,000* $135,000

Facilities Planning and Space Utilization

1. Prepare functional position descriptions in the Facilities Planning Department.	Administrative-Local		
2. Standardize reporting system of student population and facilities inventory.	Administrative-Local		
3. Design and utilize mechanized population and facilities inventory studies.	Administrative-Local	Annual Saving	$53,000
4. Transfer tentative facilities budget cost preparation to the Department of Operation Services.	Local Board		
5. Provide adequate storage facilities for the protection of vital records.	Administrative-Local		
6. Reassign the licensing function and recordkeeping of driver education vehicles and other motorized conveyances to those departments responsible for their administration.	Administrative-Local		

*Included in statewide figures

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
School Construction			
1. Reorganize the school construction operation by placing control and responsibility under the Bureau of Architecture.	Local Board	Annual Saving	$195,000
2. Prepare job and functional descriptions indicating line of work flow, responsibility, accountability, and authority for the Department of Operation Services' groups associated with current and projected school construction.	Administrative-Local	Annual Saving	$49,000
3. Establish a detailed and daily status report for school construction projects.	Administrative-Local		
4. Design and implement a retrieval and tracing system for documents within the Board of Education.	Administrative-Local		
5. Require verification and approval by the field superintendent of the contractor's affidavit submitted with his request for payment.	Administrative-Local		
6. Establish written guidelines for the control of expenditures on school construction projects.	Administrative-Local		
Pupil Transportation			
1. Discontinue the practice of transporting nonhandicapped children from and to their homes.	Administrative-Local	Annual Saving	$108,000
2. Remove the welfare attendants from vehicles transporting nonhandicapped school children from and to their homes or gathering locations.	Administrative-Local	Annual Saving	$465,000
3. Renegotiate selected bus contracts.	Administrative-Local	Annual Saving	$222,000
4. Review periodically the economic feasibility of changing from leased bus service to full ownership.	Administrative-Local		
5. Extend the time between acceptance of bids for pupil transportation and performance of contracts.	Administrative-Local		
Pupil Driver Education			
1. Contact manufacturers directly to increase the percentage of donated vehicles.	Administrative-Local	Annual Saving	$48,000*
2. Institute an analysis program for driver training administration.	Administrative-Local		
3. Charge driver education pupils a nominal fee to recover vehicle operating costs.	Local Board	Annual Saving	$192,000

*Included in statewide figures

Insurance

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Increase the administrator's staff by at least one person.	Local Board	Annual Cost	$15,000
2. Assign administration of public liability claims to the Law Department.	Local Board	Annual Saving	$49,000
3. Cancel the fire, theft, and collision insurance paid by the board on driver training cars.	Local Board	Annual Saving	$12,000
4. Prepare specifications and negotiate insurance contracts with qualified local agents, brokers, and insurance companies.	Administrative-Local		
5. Require a specific policyholder rating for casualty insurance companies and a "reccommended" rating for life insurance carriers bidding for board coverages.	Local Board		
6. Require liability clauses in the repair contracts.	Administrative-Local		
7. Renegotiate coverage and premiums on catastrophe insurance.	Administrative-Local	Annual Saving	$100,000
8. Review the feasibility of administering accident insurance claims within the Law Department annually.	Local Board		
9. Cancel the duplications in coverage which exist on two board properties.	Local Board	Annual Saving	$25,000
10. Cancel physical damage insurance on board-owned automobiles.	Local Board	Annual Saving	$7,000
11. Place excess insurance on workmen's compensation claims over $1-million.	Local Board	Annual Cost	$35,000
12. Insure valuable records and board-owned data processing equipment.	Local Board		
13. Include boilers, pressure vessels, and other types of boiler machinery in the catastrophe insurance policy.	Local Board		
14. Establish a safety committeee at each school site to make regular inspections.	Administrative-Local		

Health Services

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
1. Centralize the administration of the health care programs.	Administrative-Local		
2. Hire registered nurses instead of teacher/nurses for health care programs.	Local Board	Annual Saving	$925,000
3. Provide an office manager for the Bureau of Medical and Health Services.	Local Board		

RECOMMENDATIONS	ACTION REQUIRED	SAVINGS, INCOME OR COST	ESTIMATED AMOUNT
4. Consolidate all medical functions within the Bureau of Health Services.	Administrative-Local		
5. Utilize public health services wherever possible.	Administrative-Local	Annual Saving	$1-million
6. Evaluate the manpower requirements for doctors and nurses in the medical program.	Administrative-Local		

Attendance Services

1. Centralize administration of the school attendance function and authorize the position of supervisory attendance officer in the districts.	Administrative-Local		
2. Revise the manpower requirements for school attendance officers.	Local Board	Annual Saving	$624,000
3. Eliminate many of the forms and statistical reports prepared in the Division of School Attendance.	Administrative-Local	Annual Saving One-Time Cost	$26,000 $2,000

Section V
Recommended Implementation

Governor's Commission on Schools
Business Management Task Force

Recommended Implementation

This report contains the findings and recommendations of a task force from private industry in Illinois. More than 28,000 man hours were spent in evaluating resource utilization and management techniques as they are now practiced in our state's elementary and secondary education systems.

The value of their work depends upon the degree to which these recommendations are followed. Therefore, the implementation phase presents an opportunity for continuing effort to improve the management and utilization of resources associated with elementary and secondary education. The following program for implementation of the recommendations contained in this report is offered for consideration by the Governor's Commission on Schools:

- Appoint a Review Committee—The Governor's Commission on Schools should appoint a committee with the specific responsibility of studying this report. This committee should consist of individuals who are closely associated with the administration of elementary and secondary education, and representatives of the business community who participated in preparation of this report. They should report in approximately 60 days to the Governor's Commission on Schools.

- Appoint Functional Panels—This committee would find it advantageous to appoint panels consisting of superintendents and school business officials to analyze the various functional areas of the report. Assuming these panels of superintendents and business officials meet separately, spending from one-half to several days at each meeting, the analysis could take place quickly. These panels would evaluate the individual recommendations in this report and, if necessary, contact representatives of the Business Management Task Force for interpretation. Further, they would report conclusions, recommendations, procedures, and possible alternatives to the Review Committee.

- Appoint an Implementation Coordinator—The Governor's Commission on Schools should appoint an individual to serve as Implementation Coordinator who would act as staff liaison for the Review Committee and its corresponding Functional Panels. In conjunction with that program, he would develop a specific timetable for implementation. This individual would be responsible for overall planning and monitoring the implementation program. He would issue progress reports regularly to the Governor's Commission on Schools. Additionally, the Implementation Coordinator would work closely with appropriate representatives of the Bureau of the Budget and the Office of the Superintendent of Public Instruction to determine acceptable and valid means for measuring the financial impact of implementing recommendations. He would be instrumental in developing appropriate accounting procedures for reporting progress. Finally, the coordinator would prepare and submit periodic reports on implementation progress to the public through the mass media.

- Interface with other Task Forces of the Governor's Commission on Schools—The Business Management Task Force has completed its assigned review. Therefore, it is suggested that the other task forces still working in areas of school finance, organization and structure, and classroom quality, utilize the findings and recommendations of this report for consideration and deliberation.

It is apparent that emphasis on implementation and follow-up must logically flow from the state to the local level. However, there is tremendous potential for immediate and indepedent action by local school administrators and local school boards.

One very important aspect of this implementation process is the involvement of local business expertise in local district activities. Therefore, a recommended approach would be to utilize existing service groups which have educational advisory councils. Where none exist at the community level, it should work toward creating a blue-ribbon advisory council of business, professional, and industrial persons to assist in the task of improving management functions of local school districts.

Section VI
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Governor's Commission on Schools
Business Management Task Force

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